A

HAND BOOK FOR RIFLEMEN;

CONTAINING

THE FIRST PRINCIPLES

OF

MILITARY DISCIPLINE,

FOUNDED ON RATIONAL METHOD;

INTENDED

TO EXPLAIN IN A FAMILIAR AND PRACTICAL MANNER,

THE

DISCIPLINE AND DUTIES

OF

RIFLE CORPS:

CONFORMABLE TO THE SYSTEM ESTABLISHED FOR THE

UNITED STATES' MILITARY FORCE,

AND

THE LATEST IMPROVEMENTS

IN THE MODERN ART OF WAR.

THIRD EDITION.

BY WILLIAM DUANE,

ADJUTANT GENERAL IN THE ARMY OF THE UNITED STATES.

Immortal liberty your souls inspire,
With manly patience and heroic fire,
The rudest shocks of fortune's storm to bear,
Each ill to conquer, every death to dare;
To *rush undaunted in the adventurous van,*
And meet the Britons, man opposed to man,
WITH SURER AIM. . . . . HUMPHREYS.

PHILADELPHIA:

PRINTED FOR THE AUTHOR.

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1813.

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DISTRICT OF PENNSYLVANIA, TO WIT:

L. S. BE IT REMEMBERED, that on the 20th day of July, in the thirty-seventh year of the Independence of the United States of America, A. D. 1812, William Duane, of the said district, hath deposited in this office, the title of a book, the right whereof he claims "as author, in the words following, to wit: "A Hand Book for Riflemen: "containing the First Principles of Military Discipline, Founded on Rational "Method; intended to explain in a familiar and practical manner, the "Discipline and Duties of Rifle Corps: Comformable to the system established "for the United States' Military Force, and the latest improvements in the "Modern Art of War. By William Duane.

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D. CALDWELL,
Clerk of the District of Pennsylvania.

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THE PLATES.

Some mistakes in numbering the plates having taken place, owing to their being in the hands of the engraver while the first edition was printing, the following explanation is given to prevent errors; and it has been deemed proper, for uniformity sake, to let this edition preserve the text in the same form.

The four first plates in order, are illustrations by human figures, and are numbered, No. 1, 5, 6, 4.

No. 1. is an illustration of the movements from both flanks of a platoon, by an outward facing and wheeling to the front, and the *re formation* of the platoon by the new oblique movement.

No. 5, originally intended for No. 2, and which is arranged in that order, presents the advance of the right half-platoon, a given number of paces, and the quarter platoon again advanced and extended, for skirmishing *en tirailleur*.

No. 6, intended for plate 3, exhibits four different dispositions of firing in retreat, as described on the plate.

No. 4, is the advance from the centre of half companies....and the final restoration of the platoon by oblique movement.

The next four plates are Nos. 1, 2, 3, 4, and explain the movements of riflemen in different modes. These plates are from the American Military Library.

The remaining four plates are also from the American Mliitary Library, and are numbered in the following order:

No. X. Three illustrations of movements in action.

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A HAND BOOK FOR RIFLEMEN.

CHAP. I.

§ 1. OF DISCIPLINE.

THE discipline of armies, it must never be forgotten, is intended to produce an unity of force....a consentaneous impulse of all their parts....to bring into action, with the greatest effect, and in a suitable manner, every description of troops which compose an army, according to the received principles of tactics, and to the design of the commander in special cases. This is the sole purpose of discipline, and the better any system of discipline is adapted to produce these effects, the more perfect it is.

Whoever undertakes the military profession, whether as a practical soldier or as a teacher, will do well to consider....*first*, what is to be accomplished by military means....*secondly*, what are the means by which military power is rendered successful ....and *thirdly*, whether he who undertakes, comprehends the duties which he is bound to perform the moment he makes his engagement with his country.

He will perceive that all men are nearly alike when educated alike, that there is, indeed, no other difference between men in all nations, but what arises out of superior and inferior health and their educated habits; and that, therefore, there must be some cause, which enables the men of the same country, as well as the men of different countries, to resist and triumph over equal or superior numbers. That in short, an army may be formed of 9000 men out of a mob of 10,000 men; the same men who composed the mob of 10,000 men on the first of January, may on the first of March, by means of military discipline, be rendered perfectly competent to face and defeat a mob of 40,000, without difficulty and almost without danger.

He will perceive in this fact, that military discipline must possess some principles or properties, very important in

themselves, when they give to one man the power of four, six or ten men.

The great secret of the failure of mobs consists in this, that mobs act without confidence, from various causes; the diversity of opinions and judgments among a multitude of disconnected men, leaves them without any common rule of individual or general action; they may all wish to accomplish the same purpose....they may all be equally fervent, resolute and disinterested; but they cannot know the shades of judgment or the extent of the discretion of each other....one man may conceive a plan, and another a different plan, either of which properly executed might be proper, but there are no means by which others can be brought to adopt and execute their conceptions, nor to direct them to one object; and there may be a thousand plans among ten thousand people; and the authors of a bad plan may have more influence than the authors of a good plan....and thus mobs always fail, if resisted by a body actuated and directed by one purpose and to one object, in which opinion is surrendered in order to produce continued action, and that the whole concur in one common design and manner of action.

Thus the great secret of military discipline consists in correcting and providing means to remedy the causes of failure in mobs. It commences ostensibly with teaching men *how to walk*....but at the same time it teaches them *how to obey*. The soldier learns to walk so that the whole of an army may walk in a given time an equal number of paces....and these paces of equal length. The soldier learns to obey, because unity of action towards a single end, is necessary to remedy the weakness which is found in a mob....and an army without discipline, without subordination, without officers competent to lead them, and to lead them properly, is no better than a mob.

The whole of military discipline then consists in producing on a body of men an uniform habit of acting and thinking; or executing movements in any manner, time, and place, as they may be commanded to do. Unless this habit of motion and obedience be acquired, there is no discipline; and that discipline which renders these objects most certain, simple, and effective, is the best.

These principles are universal....they apply to every part of an army....and although there are various kinds of troops, and

each kind has something peculiar to its own particular kind; the principles of obedience, and the exact and uniform execution of movements, are common to the whole of an army.

Every species of troops should first acquire the infantry discipline of marching, evolution, and exercise. They should acquire the equal pace of 24 inches, as the uniform extent of their step in marching, and be able to keep that pace a whole day; they should know the method in which infantry move and manœuvre; and they are then able to join a rifle corps, a corps of artillery or cavalry; for as the infantry compose the main body of every army, and as *riflemen*, *artillery*, and *cavalry*, are only auxiliaries of the *line of battle*, those who understand infantry movements, will the better understand their own duties; which they cannot so well understand, unless they first learn infantry duties.

This Hand Book being for *riflemen* only, it is proper to state that they ought first to learn the duties of the infantry drill, and their immediate drill then becomes easy to them.

§ 2. ORIGIN OF RIFLE CORPS.

Rifle corps, called also *Sharp-shooters* and *Tirailleurs*, sometimes *Chasseurs à pied*, and *Yagers*, and also *Voltiguers* and *Eclaireurs*, according to the service upon which they are employed; owe their rise and importance to the American revolution. They were the creation of accidents, but of accidents proceeding from natural circumstances, and became important from actual experiment, before they were adopted into military establishments.

In the war of the American revolution, the use of riflemen was demonstrated, and soon improved upon by those European officers, who had, by being allies or enemies of America in the contest, witnessed the effect of the desultory and direct fire with smooth barrels at Bunker Hill, with rifle barrels at Saratoga, and in all the subsequent actions of the revolutionary war.

The habits of life of the American farmer, and the early necessity of self defence against the rude men of the wilderness and the beasts of the forest; gave the rifle gun or grooved carabine a preference over the plain fusil or gun; it was found more certain in its execution than the smooth bore of the fowl-

ing piece and firelock, by those who were always armed. The habits which grew out of the state of early settlement, in a country yet uncultured and uncivilized, made every man a *good shot*. The dangers from the Indians and the wild beasts of the desert, were then the first incentives to expertness, and the causes of skill in the use of the rifle. The pursuit of the deer and other animals, and all the various birds which furnish what is understood by the comprehensive term *sport*, administered to the habits which were necessary to defence, and each to the other. No game laws, nor religious jealousies, retarded or checked the alacrity of the American farmer. The youth, at the moment he was able to pull a trigger, was educated to the sport of the field, and the expertness of the American farmer became proverbial, as the use of the *rifle* was an indispensible qualification to every man who had occasion to defend himself, or taste for the sports of the field and the forest.

In this situation of the country the American revolution commenced. A foreign veteran army, led on by generals schooled in the tactics of Prussia, appeared amongst a people strangers to the concert of battalions or brigades; to whom the tactics and manœuvres of the scientific soldier, and the arts of the engineer, were alike unknown. But there was not a man in the country who could not *hit* a space of a foot diameter, at one hundred and fifty yards, with a single ball. The great mass of the settlers remote from cities could shoot a squirrel, and shoot it in the head from choice, and with confidence and certainty.

From such materials, ready prepared, the sagacity of the first founders of American independence, formed a force new in its character, and more fatal in its tactics to the armies of Britain, than the Hungarian hussars had been to the opponents of Austria, the Prussian artillery to the enemies of Frederic, or the French echellons to the coalesced powers of Europe. The first operations of the new species of light corps, were conducted and regulated by the mode of Indian warfare, by the judgment of the citizens who associated together, and agreed to act on particular points of the British lines, on their columns of march, and on their outposts and foraging parties, and in such numbers as accident brought together.

The momentary experience of the Massachusetts yeomanry in their pursuit of the British corps at Lexington and Concord in April 1775, and the effect of their spirit and perseverance in

pursuing and routing a more numerous body of disciplined soldiers, inspired an auspicious confidence in this new mode of warfare; subsequent events confirmed these early prepossessions, and the application of this species of action to operations of the line, at the battle of Bunker Hill, where the British suffered in the loss of officers and men to an extent unexampled, inspired the British during the remainder of the war, with such constant apprehension, that the officers were thenceforth clad and accoutred like the rank and file, to evade, if possible, the dextrous fatality of the expert sharp-shooters. The confidence of the Americans was encreased in proportion to their success....and soon after the campaign which was fatal to Burgoyne, corps of riflemen assumed a more consistent organization; they were formed into companies, embodied into regiments, and placed under skilful and intrepid officers....and in the course of the war were eminently distinguished by their gallantry under a Morgan, a Mifflin, a Steele, and other brave officers.

The British endeavored to collect bodies of tories and refugees, to form similar corps to counteract this species of force; and the auxiliaries from Hesse and other parts of Germany, brought some who were employed under the denomination of *Yagers* or *hunters*, in an analogous warfare.

The French who had been engaged in the wars of the revolution, had seen the effects produced by these light troops; they had not forgotten them; and on the first movements of the French revolution, endangered by the defection of so many military men of the old school, they saw the necessity of a new organization for raw troops; experience pointed out to the French the fitness and utility of these detached corps, who were called *tirailleurs*; a term significant of one who fires at random, or at his own discretion, and without a special command; in a desultory manner, but with deliberation. To give them the consistency of infantry they were disciplined as infantry of the line, or were selected from the most expert of the whole army; various corps were embodied under the denomination of *Chasseurs à pied*, or *foot hunters*; Voltigeurs or Vaulters, from the agility acquired in a particular branch of exercise on service.

The Austrian and Prussian, and other German armies, have adopted the system of rifle corps; and very soon after the British engaged in the war on the European continent against France, they found the necessity of adopting them likewise.

The celebrated general Lloyd, during his services in the Austrian army, particularly in the wars in Saxony, Bohemia, and Silesia, against Prussia; very sagaciously perceived the defects of the prevailing military dispositions, and although he did not immediately organize any corps upon the principles which he recommended, he very plainly points out those services, for which some troops were required, to which *riflemen* have been since applied with all the success which his judgment anticipated. General Lloyd frequently, in the progress of his work called Military Reveries, points out the uses of this species of light troops, particularly in these terms:

"Armies," he says, "are now usually formed in two or three "lines; between their lines and the enemy, *light troops*, often "amounting to twenty thousand, form a chain of observation, to "prevent the enemy from attacking unexpectedly. Frequently "they are sent out on detachments, to cover or cut off convoys, "while the main army is acting in a certain line of operation. "These light troops are considered as mere scouts, which "seldom take a part in the battle. When you advance, or "when the enemy advances, these light troops retire by files "to the right and left, and are no more heard of till the action "terminates. *Why they do not form on the enemy's flanks, "and create a diversion there, has been often a matter of "surprise to judicious military characters.* Small *bodies of "light troops* stationed *between hedges, near the high roads, "and behind clumps of trees, or in woods*, would observe and "harrass the enemy and annoy his columns, and aid a decisive "attack by the army, more effectually than ten or fifteen thou-"sand men acting in a straggling chain of observation. A "regular chain is easily observed by the enemy who manœu-"vres under cover of it, whereas a broken chain of detached "parties unites or disperses in an instant, becomes as it were "invisible, and gives immediate information of the minutest "movement made by the enemy." This little extract gives a perspicuous view of the duties of riflemen.

Baron Gross, an able officer, who has published an useful tract on the duties of an officer in the field, thus illustrates the utility of the American discovery in the art of war, and shews the effects which were realized by the French through this means.

" The French since the revolution, have so successfully in-
" troduced a new military system, that it becomes impossible to
" oppose them effectually, by any other mode than adopting
" one founded on similar principles. They send a number of
" *riflemen in front of their line* to annoy their adversary, *and*
" *conceal behind them the different movements of their columns.*
" Nothing can be effected against this disposition but by oppo-
" sing light troops of a similar description."

It is here obvious, that the means recommended by Lloyd upon theory, and adopted from the American practice, have been momentous.

An English writer, who blends more asperity than becomes an officer, in a didactic work, gives very strong evidence of the truth which he reluctantly admits in the successes of the French rifle corps, and the causes which gave rise to them; in the following remarks:

" The art of war during the French revolution has under-
" gone a considerable change. Pitched battles and regular en-
" gagements are now in a great measure avoided, and a con-
" stant series of unremitting operations are directed against the
" flanks and rear of an enemy, to retard or prevent his progress
" in front. To light movements the French are indebted for
" much of their success in the war; and they adopted them
" more from necessity than choice. Their numberless con-
" scripts, undisciplined, marched raw to the armies, were
" thrown in swarms on the flanks of the Austrian columns to
" act irregularly, and their success answered the expectation.

" The Austrian columns, unaccustomed to this novel spe-
" cies of attack when they looked for a regular battle, fell into
" confusion and retreated before an undisciplined rabble. Such
" is the origin of the war of posts which the French found it
" convenient to carry on, till tactical habits rendered their
" troops capable of acting in the line. Nations adopt from
" each other what sad experience proves to be an obvious ad-
" vantage in carrying on war. The action of rifle corps and
" light troops is now much depended on, and not unfrequently
" decides the contest. The tactics of light troops have now
" necessarily become an important branch of general discip-
" line."

This short sketch of the origin and character of rifle corps was a necessary preface to their mode of discipline and exercise.

After their introduction into the armies of Europe, they were first formed into companies, and subsequently into regiments, in the campaigns of Switzerland and Italy, against the Austrians and Russians, and subsequently in the battles which determined the war against Austria, Russia and Prussia. The French corps susceptible of being formed as riflemen, amounted to forty thousand men in the grand army, and greatly contributed to the victory in the memorable battle of Jena. They were composed of men selected from the line, and denominated *corps d'élite*, or select troops.

European nations being our imitators in this branch of military force, renders it necessary in America to pay the more attention thereto, because should a war occur on our shores, we shall be opposed by the weapons which we have ourselves invented. Upon *rifle corps*, and horse or *flying artillery, artillery legère*, we shall have to rely much in conducting war, because these are the means best suited to the nature of our country.

The service of rifle corps is properly a branch of the service of *light troops*, generally so called, as well as the *chasseurs* of the French, and what is called light infantry. In the old establishments of Europe, prior to the American revolution, light infantry consisted of a single flank company attached to each regiment. The French had embodied before the revolution a few corps wholly of that description. They now have grenadier riflemen as well as battalion; and they select men of particular expertness and form them into distinct companies of the same half brigade; such as *swimmers, vaulters*, &c.

During the American revolution, some of the most active British officers had suggested the employment of the flank corps of the regiments in a collective manner. Among these were general Howe, general Williamson, and general Gray, memorable for their midnight expeditions. Since the French revolution, the European nations generally have pursued the system, and whole regiments and divisions of armies have been formed of *infanterie legére*, or light infantry, *chasseurs à pied, tirailleurs* or sharp shooters, or rifle corps, all of which bear some analogy to each other.

CHAP. II.

ON THE DRILL OF RIFLEMEN.

§ 1. THE drill of the rifle company should be conducted in the same manner as the drill of the infantry. They should be capable of forming and displaying the column, advancing and retreating in line....in open and in close order; in single and in double files; and the whole detail of the battalion evolutions. The generality of officers as well as men, do not form an adequate idea of the importance to be derived from a previous discipline of riflemen in the common evolutions of the infantry; and although as *marksmen*, the American riflemen surpass all others; in what regards *discipline* and the strength and confidence arising from discipline, they are inferior to the riflemen of other nations, and for this reason, that in European armies the riflemen are *selected* out of infantry corps already disciplined, and it is by the skill which they display in the target practice as infantry, that they are chosen for the *tirailleurs* or riflemen; so that their appointment to rifle corps takes place only after they have had an infantry discipline.

On the other hand, the American riflemen are not made acquainted with infantry movements....very little care has been bestowed on any part of the rifle discipline but what relates to the mere firing, while the importance of discipline is never made known, and therefore remains unknown, and they have consequently no ideas of the effect of discipline, and are led to believe that all their military effect is in distinct military action, and not at all dependent on action combined.

The drill cannot be better introduced than by the counsels of an enemy, by an officer who gained his experience in arms against the United States. It is from the second chapter of the treatise on the duties of light troops, by colonel Van Ehwald, who commanded a company of Hessian Yagers in the war of our revolution. "Light corps," says colonel Ehwald,

" are in general negligently drilled, and are supposed not to require any knowledge of manœuvres; their movements therefore are inconsistent and incorrect; nay, I have seen several which were hardly able to face at the command to the right about, or to march in sections.

" The principal cause of this evil is, that these corps are frequently raised in a hurry, and *that in instructing them an improper method is pursued;* for the instruction, as in so many other branches of military affairs, *begins where it should end.* The whole attention is turned to a *useless manual exercise, and to trifles of the same kind,* while what is truly useful to such a corps is left untaught. The officers commit the labor of drills to non-commissioned officers who have not opportunities to study or know what is proper, they teach them a few mechanical tricks, and when the inspector comes, he finds them clean dressed, and that they handle their arms *prettily;* upon the credit of this, and to save himself the trouble of a minute inspection, and often to oblige the commanding officer, he passes them in muster....and it is not until they have joined the army and their services are called for, that it is found they have every thing to learn.

" There are men who pretend to be acquainted with military matters, and who while they might be excused for their ignorance, if they did not make the pretensions, are pernicious from the necessity they are under of condemning every thing as useless pedantry which they do not understand. Others, equally ignorant, take their words for it, and as men of this kind *flatter their superiors,* which men of real merit will not bend to do, military knowledge is destroyed before it is begun. Men of this class say, that in the presence of an enemy, all these school rules drop to the ground; as every thing must be carried by the point of the bayonet....and why should men be tormented with *drills for nothing?*

" Thus it is, that many are led to believe that drill and exercise are not necessary for *riflemen,* because they are not required to fight battles in close order; but supposing that a light corps, of which I have seen some examples in the American war, should have the good fortune to escape the bad consequences of a want of discipline, through a similar want on the other side, would it not be more satisfactory to the

commander, and better deserve the approbation of men of sense, if he were to discipline his corps so as to be calculated for all sorts of duties; besides it impresses even an enemy with respect, when he sees a corps of riflemen as well disciplined as a corps of the line. The soldier himself feels a certain confidence and pride from the consciousness of his skill, and is prepared for every thing.

"As soon as the recruit can face to the right and left correctly, let him march and wheel a few days in ranks, and without arms, after which put arms in his hands, teach him the firing motions, and how to load and fire correctly and skilfully; bring him to the target and give him practice there; divide the company into platoons, produce emulation among them, and in six weeks, by drilling twice a day, two or three hours at a time, the officers and men will be fit for duty. When the men have learned a short manual, devote the morning drills to firing at the target, and the afternoon to exercise and manœuvres."

It is unnecessary to quote more from this valuable work, which has been translated from the German into English. Thus much will serve as a preface to the rifle drills.

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§ 2. The first drill should be conducted as in the infantry, forming, ranking and sizing; the tallest men on the right and left of the rank, and diminishing to the centre, and so of each rank; and should be conducted in the following manner:

The bugle or drum having brought the men to parade at the appointed hour, and the officer who has charge of the drill, with two or three non-commissioned officers, one of the latter is posted on the right, and the officer gives the word,

Fall in.

The recruits take their places successively on the left side of the non-commissioned officer, in an easy and unconstrained position; the feet neither too close nor too distant, toes turned out; the face to the front, and eyes so directed as to see about 18 or 20 yards on the ground in front; the hands suspended by the side without pressure, so that the middle finger may be placed opposite the seams of the pantaloons; and the breast thrown so easily forward as to leave respiration perfectly free.

The non-commissioned officers should at first aid the men in sizing, so that the right man shall be the tallest, and that they shall descend regularly to the left....as soon as the whole are formed in this disposition, the officer of the drill gives the *precautionary word,*

Attention.

THE COMPANY *(or squad)* WILL TAKE CARE TO TELL OFF IN DOUBLE FILES.

Tell off.

The first man tells *one*, the second *two*, and so on to the left ....in the following order:

The officer in charge of the drill will then proceed to inform them:

The company (platoon, or squad) are next to form double files faced to the right....the front rank will then be faced to the right about, and countermarched upon the left of the rear rank; while the files composing the rank who have called one, move up to the right hand file, still facing to the right.

They will be then taught that every movement from the moment the rank is formed, until the word *halt* is given, must be conducted at *marked time;* and marking time is explained to be the alternate raising of the feet, in musical time, which will at first be taught by the sound of the voice....*one....two.... one....two....*and that on moving from the line it must be accomplished in even paces of 24 inches, in the same time.

The officer will then give the words of precaution:

The files which have named ONE, *will keep their ground, but face to the right, when they hear the word right; the even files, or those which have named* TWO, *will not move until they hear the word wheel.*

Attention.

TAKE CARE TO FORM DOUBLE FILES BY WHEELING UPON THE RIGHT....OR ODD FILES.

Mark time.

Double files....right....

At this word the odd files face to the right, and the company presents the following disposition:

2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1

On the second word....*wheel*....the squad will present the following disposition:

. . . . . *Wheel.*

The even files now forming the front rank, and it being the object to bring them all into one rank, the front rank must be countermarched by the following words:

Front rank....right about....face.
Upon the left countermarch....march.

They will then move, and exhibit the following movement:

When the whole have formed on the left of the odd files they will present this disposition, or faced to the right, when they receive the word,

Cover.

By this word is intended that the men in succession from the head of the rank, should cover the space from the first to the last man in a direct line; each man looking directly at the back of the head of the man before him. It must be kept in mind, that the whole of this drill must be performed at *marked time*, and that attention must be constantly paid to this, and from the time any movement is begun until the time it is completed, the men will be kept with moving feet.

The officer will then give the word:

Front face....halt.

The whole having assumed this position, now look to the right, and dress by the right hand man.

But after a few drills, there should be no halt, until a considerable number of marches or evolutions shall have been executed.

---

§ 3. They are next brought to *marked time*....and faced to the *right* several successive times....then to the *left* several successive times....and then to the *right about*....and to the *left about*, until they have acquired the habit of attending to the exact word of command without mistake.

They must be taught to face to the right by three short steps, beginning with the *left* foot and ending with the *left* foot; and in going to the *right* or *left about*, it must be done also with *three steps*, always beginning with the *left* foot; and they must next be accustomed daily for several days to be faced to any side without preparation, and at the word as ordered; and as often as they mistake, they must be continued at the alternate facings until their attention is so well fixed that they will no longer mistake.

It must never be lost sight of, that all movements must be at *marked time*; no turning upon a fixed foot, nor marching at slow time, which is adapted only to funeral service.

After they have been well practised in the facings, they must be marched in *single files*, or *Indian file*; as this mode of marching is particularly adapted to riflemen; the drills in marching by single files, must be practised with great diligence, exactness, and perseverance.

The officer will, before they are marched, and dressed to the front, instruct them as to the meaning of the *terms*, such as *file* and depth of ranks; he will tell them that a file consists of the number of men in a rank faced to the front....that if it be a single rank of twenty men in front, it is a rank of twenty files; and that if there are two ranks of twenty men in front, that still there are only twenty files; for a file may consist of one, two, three, or four men, if there are so many ranks. That *Indian* file is a term adopted from the usage of the Indians, who move in one rank only, and step in each others' paces. That when there are two ranks they are called double files, when three ranks triple files; but in the ordinary duties of *riflemen*, they rarely move in any other order than that of *two ranks* or double files, or in *one rank* or single files.

So they must be told that they will have to march at the *Indian pace*, when they have to form company; and this pace or half trot must be explained.

---

§ 4. To commence the exercise in marching, they should be first marched in rank entire to the front; faced to the right about, moved to the ground they moved from, and brought to the right about again; but the words of command must be given in this manner....the company being already ranked and sized:

Attention.

THE COMPANY WILL TAKE CARE TO ADVANCE TO THE FRONT.

Mark time.

One....two....one....two.

The officer here repeats the words *one....two*....the men lifting the left foot and striking the ground at *one*, and lifting the right foot at *two*, and so alternately....but in marking time in this manner, they must not move off the ground they are paraded upon, without another word, that is either....*forward*....or *march*.

TAKE CARE TO ADVANCE IN RANK.

March.

One....two....one....two....

Right about....face.

Mark time....dress.

Forward....march.

One....two....one....two....when they have reached the ground they moved from,

Mark time.

Right about face....halt.

---

§ 5. The next movement will be facing to the right, and this must be practised until satisfactorily executed, with precision and correctness.

Attention.

THE COMPANY WILL TAKE CARE TO MOVE IN SINGLE FILES.

Mark time.

One....two....one....two.

Right face....forward.

They then present this disposition....

Having marched in that direction equal paces and in equal time, as far as is convenient, they receive the word,

Right....wheel.

And then appear in the following position:

The squad is wheeled several times by the right, and at length into its first position and faced to the front; and then it is faced to the other flank and wheeled to the left in the following form:

Left....face.

Left....wheel.

The difference between *facing* and *wheeling* is to be explained; that *facing* always applies to each individual; *wheeling* always to more than a single individual; or that in facing every man turns on his own centre; in wheeling every man moves in a common centre with the rest of the rank: that several wheel, and several face, but one only never wheels alone, unless a rank is marched in single files, when it implies that every file which follows, must wheel in the same direction, and at the same point; if the word of command be *right face*, every man must face to the right, and it would then be a rank faced to the right; but in wheeling to the right, the direction that the leading file takes, the whole of the files take.

The squad being marched and wheeled by the left, return to the original position, and face to the front, as before; the drill now requires to mix the movements, by facing and wheeling in different directions. The words are given with an interval.... which produce the following disposition:

Right....face.
Left....wheel.

He then changes his flank, and commences the opposite disposition with,

Left....face.
Right....wheel.

The company is now marched into the first position, and receives the word....

Halt....rest.

When they have been well exercised in these facings and wheelings, they will have learned to mark time with accuracy.... the whole rank giving but one sound with their feet....they will have learned to face in three short curved steps, and to face to the *right about* in three long curved steps. They will have their ears habituated to wait for the word of execution; if they have not acquired these habits, the fault must be in the officer who teaches. It is impossible, well taught, that these effects are not produced.

These instructions and the method of movement, correspond in every particular with the infantry movements, as do all the movements in the rank; and are therefore literally the same; but as the Infantry Hand Book may not fall into the same hands, it will be necessary to adopt so much of chap. VII. of the Infantry Hand Book as is necessary to render this Hand Book complete in itself.

CHAP. III.

§ 1. THE object of moving infantry of the line in small sections or platoons, is either to pass some object with facility, to render a movement easy and rapid, or to accommodate the order of the battalion to the ground which is to be moved upon. The same principles apply in similar circumstances to riflemen; but the movements of the battalion in line have always reference to *compactness*, and consistency in action; they are never open in action; while on the other hand, riflemen on their peculiar service, always move in a loose order; not so open as to lose their mutual support and dependence, but they always present to an enemy an open and constantly moving order; a rifleman in the face of an army never tarries on one spot longer than while he fires; he moves in front on a line parallel with the line of the enemy, and retires in an indirect line; and he retires the moment he fires, when his place is supplied by another file who pursues the same course.

It was necessary to explain this, in order to show how the same method of instruction applies to two different modes of practice.

The riflemen on the wings or in the front of the line, opening an action, or covering the manœuvres of the columns or the line, always move to the front in Indian file, or by the heads of sections of single files or of double files, at two paces apart, flank and front....either from the flanks, or from an interval made in a battalion by a temporary quarter wheel of a platoon or half platoon; it is therefore particularly necessary that they be at all times ready to move in any number of sections required; for this reason it is necessary to practise the movements by heads of sections, with great perseverance and dexterity; and by one word of command: here we find the great uses of the simple but invaluable contrivance of telling off, which the men themselves should be accustomed to do. This will be found in the progress of the drill, and of the more enlarged movements, of the greatest importance, as it will at length become a habit in the minds of the men to know their place in

the rank, and they will with ease be capable of formations on any front, without previously telling off, or in any other direction that is required by the general word of command. The officer will give the word,

Attention.

And he will follow it by the precautionary information of what movements are proposed to be made.

THE COMPANY WILL TELL OFF ITS NUMBER OF FILES FROM RIGHT TO LEFT.

Tell off.

The officer then states as precautionary:

There are twenty files, which will form two sections.

No. 1, *is the right.....No.* 10, *the left of the first section.*

No. 11, *is the right.....No.* 20, *the left of the second section.*

The two sections will now take care to execute the same movements by one word of command.

The whole....mark time.

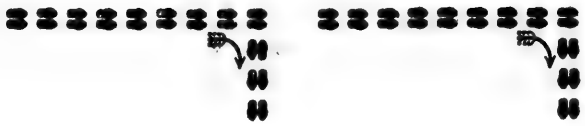
The whole raise the left foot gently about four inches from the ground together, strike it briskly to the ground together; raising the right foot and striking it also, and so each foot alternately, which they must on all occasions continue to do until they receive the word *halt*. The officer will, to give them the time, tell constantly until they are well drilled to time.... *one, two....one, two.* The officer will then give the precaution:

THE WHOLE WILL TAKE CARE TO FACE TO THE RIGHT AND TO WHEEL TO THE RIGHT *(or rear)* BY HEADS OF SECTIONS.

The whole...right face.

By heads of sections....right wheel.

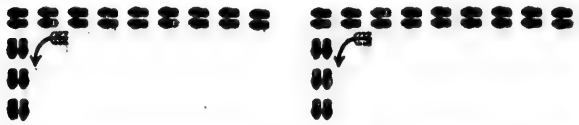
This presents the first disposition, of single files, and the first movement in broken ranks.



The sections are now marched and wheeled to the right, and again brought to their first ground and fronted; when they receive the precaution:

THE WHOLE WILL TAKE CARE TO FACE TO THE LEFT, AND WHEEL TO THE LEFT.

The whole....left....face.
Heads of sections....left....wheel.



The whole being repeatedly wheeled by the left, and brought into their first position in single rank, will proceed to movements on the centre.

---

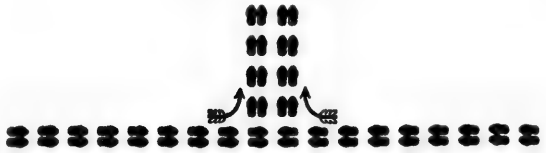
§ 2. The squad will now proceed to execute facings inward from the flanks, and movements by the centre.

THE SECTIONS WILL TAKE CARE TO FACE INWARD *(or to the centre)* AND ADVANCE IN DOUBLE FILES TO THE FRONT.

This operation will be performed by the right section facing to the left, and the left facing to the right, and the left man of the right section, and the right man of the left section, facing to the front ...

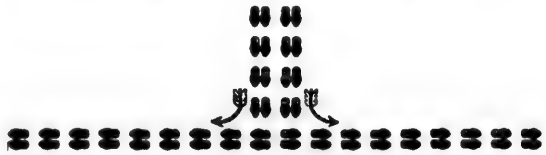
These two centre men, form the pivots in this motion, and attending to precautionary words, advance in double files from the centre to the front; they should remain faced to the front, when the following command is given:

Sections....to the centre....inward....face.
From the centre....heads of sections.
To the front wheel....march.



The next position shows this column of double files faced to the right about, marching to the same ground they had left, on the following words of precaution and command:

The whole....right about....face.
Heads of sections....outward....wheel.



The whole will resume the first position on reaching the ground, on the word....

Mark time....front face....halt.

The teacher of the drill may require to be here again reminded, that though the course of movements, or the different forms, are progressive, he must in his practice resort frequently to those movements already taught, so as indeed to keep the word of command and the manner of evolution constantly present to the memory, until they become *a habit*, until the language of the exercise and the mode of movement in exercise become predominant over every other habit.

---

§ 3. The next movement will be from the outward flanks of the two sections by opposite motions to the rear, then moving in directions parallel to their original front; gaining their first ground by facing to the right about, and each resuming its former position by corresponding wheels.

The whole....mark time.
From the centre....right and left....outward....face.
Heads of sections....to the rear wheel.

The right section here faces and wheels to the right....the left, to the left,

By another word,

Inward....wheel.

They move towards each other, where they may be dressed and fronted, or execute any of the former movements at the discretion of the officer. When, in order to be brought to their first position, they are faced from the *right about* and wheeled again into their first position.

Mark time....
The whole....right about....face.
Heads of sections....front....wheel.

These movements are illustrated in a perspicuous manner, in plate I. annexed, which will be further illustrated in a subsequent stage of the drills.

These movements should be followed by countermarching; which means only the act of the two extremes of the same rank changing places by military marching.

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§ 4. The practice of countermarches in drill may be employed to the greatest advantage in fixing the exactness of *time*, and the length of the pace; in habituating the men to wheeling without

confusion in the midst of varied movements and ranks, each file always attending to the evolution in which each is particularly engaged, and not attending to the movements of others.

The rank is now supposed to be divided at the centre, and the object in view is so to march them that the files on the right shall be brought to the left; and those on the left brought to the right. Being in one rank and faced outward, if they both wheel about on the same line, they must meet, and cannot pass each other without deviating; it must be so ordered that the sections move one by the front and the other by the rear; this will be accomplished by the following precaution and commands....

Attention.

THE SECTIONS WILL TAKE CARE TO COUNTERMARCH UPON THEIR PRESENT GROUND, AND FORM FACED TO THE REAR.

Sections....outward face,
Heads of sections....right about....wheel.
Countermarch....march.

They will then move in this form.

When they have so marched as that the rear of each section covers, in this form....

They receive the words of command....

Mark time.
Rear face....dress....halt.

As soon as they receive the word *rear face*, they perform that motion; on the word *dress*, the section on the left being a *face* out of the line, steps up and dresses by the left, and present this position....

The company is then brought by the *right about face*, to its former position, dressed and halted: and is informed that it is intended to take a position to the rear of the present ground twenty paces, faced to the rear, and that this will be executed by countermarching.

Attention.

TAKE CARE TO TAKE POST IN THE REAR TWENTY PACES BY COUNTERMARCH FROM THE FLANKS.

Sections....outward face.

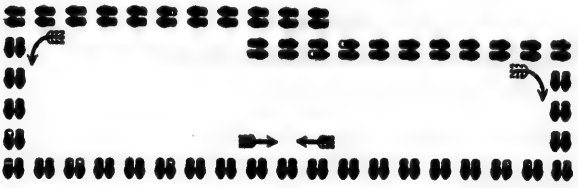
Rear....wheel.

Inward....wheel.

Rear face.

Mark time.

Right about....face....dress....halt.



The company is brought to the right about and halted. There will be only two more movements of countermarch here specified; the officer of the drill, preserving the main principles of *cadence*, length of *pace*, wheeling upon *pivots*, cannot vary his exercises of countermarching too much; he may form squares, orbs, and other figures, by wheeling round any number of a section, and facing the whole to the right about, unfold the figure, and display his rank; it is a great object in discipline to render exercises amusing to the men; exercise becomes then a recreation which never tires, and by which discipline is better established than by cruelty or abuse, or ungenerous treatment.

These drills will have prepared the men for the next stage of the drill, that of forming larger sections.

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§ 5. The next progression of formation will be into files of three, or sections of three in front.

A single rank being formed as usual, it will be required to tell off by sections of three from right to left; and the movements of the sections will now be so ordered, that by the advance of the first section of three from the ground, and an immediate wheel of the section upon its left, the successive sections will be taken up in their proper places, as the preceding sections proceed along the front. By this means steadiness is obtained in the rank, distance is easier preserved, and when the whole have formed into the column of sections of three, wheelings in that order may be practised, and the accuracy of the pace tested by every wheel of section, and corrected with the most careful exactness. Attention to exactness at this period saves a great deal of trouble, and expedites discipline beyond belief.

PRECAUTIONS.

The company will proceed to move by sections of three; they will tell off by threes from right to left; the left hand man, or file that tells three, will be the pivot of each section of three wheeling on the left; should the company wheel on the right in sections of three, the right hand man of each section will be the pivot.

Attention.

Sections of three....tell off.

The officer will see that no file misses or repeats the number, and that it be *one*, *two*, *three*, from right to left....the right hand man saying one, &c.

TAKE CARE TO ADVANCE FROM THE RIGHT BY SECTIONS OF THREE....WHEELING BY THE LEFT ON THE FRONT.

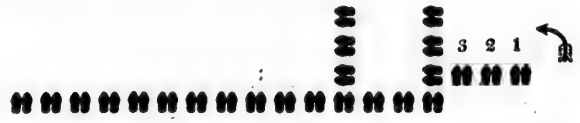
Company....mark time.

By sections of three....from the right....

Forward....march.

Left....wheel.

At the word *march*, the first section steps out with the left foot, and continues to mark time in that position, until the word *left* is given, at which word the left hand man, who is the pivot of the section, faces to the left, and marks time till the word *wheel* is given, when the other two men step off and wheel upon their pivot....and the sections step *forward* at the word, and so each section of three in succession.

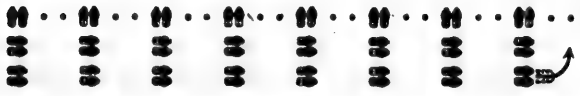


The same course of movements is now to be pursued, as in the first lessons of single files; and the wheelings are to be executed upon the same principles from the left flank to the front and rear. The first formation of the rank by reducing the column is made by left wheelings from the preceding position, as exemplified in the following figure; the company being by repeated wheelings brought to its first position, so that the left files shall stand on the ground from which they first moved. They receive the precaution:

TAKE CARE TO FORM FRONT, BY WHEELING ON THE LEFT OF SECTIONS.

Mark time.

Sections....left....wheel.

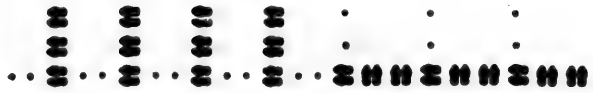


Upon the word *left*, the left hand man, or pivot of the section, faces to the left, which is the original front....the rest wait for the word *wheel*, when they move into their positions, as before.

The rank may be brought into column of three in front, by the following command:

TAKE CARE TO FORM COLUMN OF SECTIONS OF THREE, LEFT IN FRONT.

Sections of three....left....wheel.



The left half of this figure describes the position after the command is accomplished; the right half, as at the word *left*.

They may now be marched left in front, faced to the right, and marched by heads of sections; faced again to the right, when the right will be in front; and wheeled into line and halted.

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§ 6. The drills are now to be continued by single rank, but with sections formed from the division of the rank.

The company being paraded as usual, ranked and sized, they will be told that the rank is now to be divided into two parts, each of which will be called a division, or half platoon, in order to distinguish the half of the squad from lesser sections; the centre will be told off, and the whole will receive the word of precaution.

Attention.

THE COMPANY WILL MOVE BY SECTIONS OF THREE FROM THE RIGHT OF HALF PLATOONS.

By sections of three....from the right of divisions....
Forward....march.
Left....wheel.

This movement, it will be perceived, differs from the movement from the right of the rank, only in the division of the rank into two parts, which, if the drill be full, may be called first and second platoon instead of divisions; or, right and left platoon; if small, they may be called half platoons.

From the sections of three, the progress may be to sections of five, which will be executed in a single rank in the same manner, and all the corresponding evo utions will be practised as in the formation and movements in single file.

§ 7. It may be proper to remark here once more, that there is great utility in this method of wheeling into column from the right upon the front of the rank; as it secures the dress of the rank, and determines the time of stepping off, for every succeeding section, in a manner much better adapted to assure correctness than any other method. The same may be done from the left of the rank, for the same purpose, as soon as the habit is a little formed to evolution.

As the rifle corps will have to move in sections, particularly by heads of sections in Indian file, both in advancing in front or on the flank of the battalion in line of battle, and in retiring upon their line, or in passing woods or thickets, it is indispensible that they learn the method of infantry formation of sections, in order to arrive at correct ideas of the method of forming and reducing sections. The drill must therefore begin as in the infantry, with the smallest sections, that is sections of *three* and *five*, as the same principles upon which they are executed, extend to sections of larger number in front.

The officer will explain these principles, and shew that as it is easier to pass through woods with a single man in front, than with two or a whole rank; it will be necessary to be prepared at all times to move in sections of any required number.

The drills will then proceed to movements from the flanks, that is from the right or left ends of the ranks or half ranks; two sections moving at the same time, by one word, as in the following:

Attention.

THE COMPANY WILL TAKE CARE TO MOVE BY SECTIONS OF FIVE FROM THE RIGHT OF HALF PLATOONS.

The company being divided into two half platoons, say of ten files each; the first five files on the right of the whole rank, and the first five files on the right of the second half platoon, will move at the same moment and on the same word; and they will tell off in the following manner:

5 4 3 2 1 5 4 3 2 1 5 4 3 2 1 5 4 3 2 1

They will then receive the word,

Mark time.

BY SECTIONS OF FIVE FROM RIGHT OF HALF PLATOONS,

Forward....march.

Left....wheel.

The number of files here given in the sections wheeled are for the purpose of presenting the form of the movement in a more striking manner. The whole should be moved in two columns, in the manner of infantry, and wheeled in various directions; faced to the right about, and to the left, and sections countermarched by their heads and brought into their proper positions again.

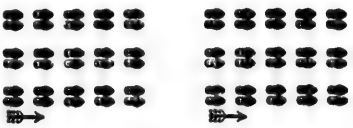
In rifle discipline, the practice must be constant of moving by heads of sections....thus the whole being now formed into two columns of five in front, they will exhibit this disposition:

It is required to take ground in that order to the right, and the word is given,

THE WHOLE....

Right....face.

They present the following order:



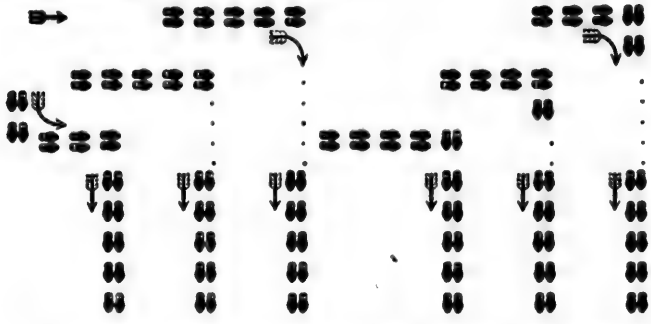
It is required to retire; and, as the primitive order, or the order in which the ranks originally stood, must be kept in view wherever the movement is not impeded by adhering to it, the

proper course will be to wheel by their right, by heads of sections, as that will bring them into their first order, with only the necessity of countermarching each section to the right about.... they then receive the word,

Sections of five.

By heads of sections....right wheel.

The sections on the left as now faced, will each advance a number of paces equal to the number of sections on their right, and wheel in the following manner:



The sections are now in their original position, only faced to the rear....to bring them to their first position, they receive the word,

By heads of sections....

Countermarch....march.

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§ 8. At this period, if they have not already acquired the infantry discipline, they should learn the principles of *echellons*, a species of movement which is well adapted to the advance and retreat of rifle corps; after they have performed the perpendicular echellons, they must be accustomed to move by single file from the *left*, or from the right of sections to the front or rear, to countermarch and fire in echellons of Indian files. The first instructions in the practice of echellons may begin with sections of five...It is understood, that the company is already *ranked, sized, told off*, and that all the movements must be in *marked time*.

Attention.

THE COMPANY WILL TAKE CARE TO FORM ECHELLONS UPON THE LEFT SECTION OF FIVE.

The left section will keep its ground.

The third section will advance a number of paces equal to its front.

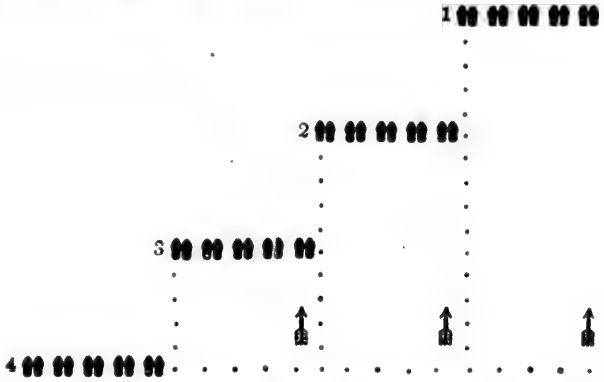
The second section will advance a number of paces equal to double its front.

And the first section will advance a number of paces equal to triple its front.

Upon the left form echellons.

Forward....march.

They, thereupon, form the following disposition:



As the sections are to advance perpendicularly to the front, a number of paces equal to the front of the sections from right to left; there being four sections, and one of them remaining on its position, the right section will have to move a number of paces equal to the front of three sections of five files, so that the right will have to advance 15 paces, the second 10 paces, and the third 5 paces; these principles should be inculcated every opportunity; and the echellon is particularly adapted to teach it accurately and test it by wheeling on the right or left of sections, which will present echellons on the front faced to; but in single movements, they are to present as small a front as possible; they must, therefore, be moved by heads of sections at all times when within *point blanc* distance; the company must be informed of this, and that the formation in parallel ranks is disciplinary, and intended to teach what infantry do, so that when seen it may be known what they are doing.

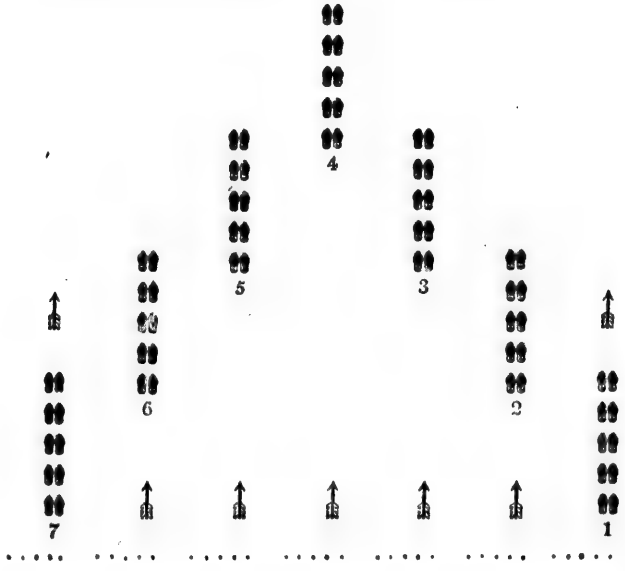
In order to shew the mode in which they must move, it will be important to practise them at this point of the drill, in advancing by heads of sections in echellon, advancing the right and left flanks alternately, then advancing the centre, reserving both flanks; the front or leading file of the advanced section making the motions of firing to the front, and *retiring by the left*....and they must be told here, that in all instances of retiring after firing, whether in extended order, or in file, they must advance by the right and retire by the left....the following disposition will convey some idea of the manner:

Attention.

THE COMPANY WILL ADVANCE IN ECHELLONS FROM THE CENTRE, BY HEADS OF SECTIONS IN INDIAN FILE....THE FLANK SECTIONS THROWN BACK.

Mark time.
Sections....from the right....by Indian file....
Forward....march.

They present this order:

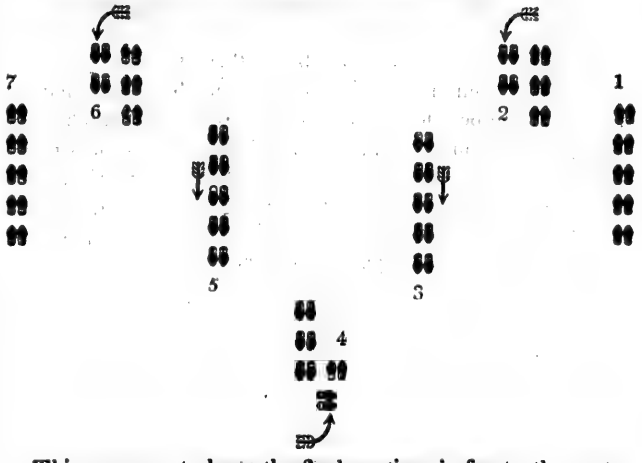


There are seven sections shown here, for the purpose of explaining the various movements: in the preceding movement, the fourth section advances by files from the right; and the sections 3 and 5 on its right and left, advance directly in the same order, but their heads not so far advanced, and in succession 2 and 6,...and 1 and 7 are on an equal front.

THE SECTIONS WILL FIRE, AND RETIRE BY THE LEFT, THE FLANK SECTIONS ADVANCED.

Centre sections....by the left....retire.
March.

They then present the following dispositions; the centre having retired, countermarch to its original front:



This movement shows the flank sections in front; the centre retired, is exhibited in the above, section 4 has already come about and is in the act of countermarching to the front, from which it had retired by the left; sections 3 and 5 are on the march to perform the same movement; sections 2 and 6 are wheeled about by the left by heads of sections, to retire the same course; while sections 1 and 7, retain their positions.

They must be constantly kept in mind to *dress*, *cover*, *mark time*, and attend to the words of command; and in these movements, they must be apprized, that they are intended to teach the manner of *going* into action and retiring from it; but that the *manner in action* is to be the subject of subsequent instructions.

§ 9. They will be next instructed in the manner of augmenting and diminishing front, for disciplinary purposes; and they will here first be apprized of the method of *half facing*....this principle will be necessary, when moving in a circumscribed position, crossing bridges, or passing defiles where there is no opportunity of acting as tirailleurs.

This principle consists in augmenting or diminishing front from the proper flank, and to the proper flank when moving in open or in close column. The movements are to be acquired always in open order.

The principle consists in this rule; that the position of every file in the line shall maintain its correspondence through every evolution. This may be understood, by counting the files, beginning on the right, and supposing the whole to be formed into sections of seven; the sections being then wheeled upon their right into column of seven files in front, the disposition shall be such as that, proceeding from right to left, the files shall be contiguous as they first stood; the first file of the second section, counting 8 and the last 14; the first file of the third section, counting 15 and the last 21; the first file of the fourth section, counting 22 and the last 28; and so on. Let it be supposed, that the column of seven files front, is formed.

1st section.

2d section.

3d section.

4th section.

It is required to augment the front from seven to nine files, so as to make a column of nine files in front.

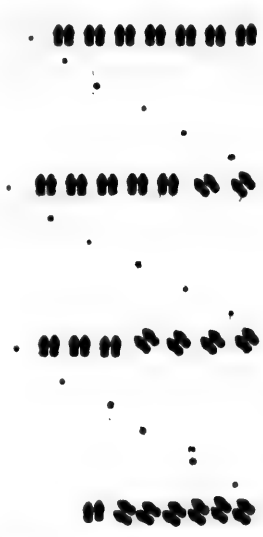
The column being in motion, the word is given:

TAKE CARE TO AUGMENT COLUMN TO SECTIONS OF NINE IN FRONT.

To render the first formations easy, until the habit is brought to it, the column may be brought to retain its position in column at *marked time*, preserving open order until the augmentation of the front is completed, for which purpose, after the precaution is given, the word

Mark time.

Form sections of nine....march.



This view represents only the movements from the right, the movements from the left to occupy the spaces vacated on the right, are performed at the same time by a side step, by direct facing to the right, when on the ground, without advancing; or by a quarter facing and advancing on a diagonal line so as to cover the right hand file of the leading section, when in motion, which must be performed in every section from front to rear. The diagonal facings must be by every single man from his

front to the direction in which he is to march and occupy, his left shoulder in the rear of the man moving before him. So that the augmentations shall always come from the right of each successive section to the left of the section in its front.

The augmentation here presents an appearance, which, by anticipation, unfolds the nature of the *Line of Science* or diagonal movement; as the front section must be necessarily augmented by the files that would count next to it in the rank, the two right hand files of the second section necessarily must march diagonally from the right of the second to the left of the first, so that No. 9 becomes the left file of the first section, in the place of No. 7; and No. 10 becomes the right of the second section; for which purpose, that file must move two paces to the right; this second section having been deprived of two men on the right, in order to possess the required number, No. 2 must obtain four men from the right of the third section, which four must move diagonally to the left of the second from the right of the third; and so the sections successively receive from the right of the sections in their rear, the numbers necessary to give them their required front. The augmentation being constantly made from the right of the next rear section to the left of the next front section.

Let it not be kept out of sight an instant, that all these changes are to be executed on the march at the quick time of a lively dance.

As the effect of riflemen depends very much on the use of their arms, they should be brought to that branch of discipline if not already taught the infantry movements, at an earlier stage than infantry of the line; the drills must therefore begin with arms at this stage.

CHAP IV.

§ 1. THE FIRE OF RIFLE CORPS.

THE duties and discipline of rifle corps are determined by the nature of the country in which they are to act. They should be so well disciplined in the movements of infantry generally, as to be susceptible of action, either in compact or detached bodies; in small or large corps; the effect of their force depends on the activity and skill of every individual. In particular positions they must act and manœuvre according to the rules of discipline of infantry of the line. In other positions according to rules peculiar to their own distinct branch of service in extended order. A skilful commander will know the means by which they may be employed with the greatest advantage; judicious officers will be ready to accommodate their movements to the general design, and a co-operation with the other descriptions of force. If circumstances demand that they act with closed ranks, conjunctly with other troops, their movements are made on the common principles of the movements of the line, and it is essential that rifle corps should be so disciplined, because without it their value would be in some measure diminished, especially if opposed by riflemen who are possessed of that disciplinary experience.

Rifle corps should on their first instruction in military discipline pass through the ordinary drill and movements of a company, and afterwards of a battalion of infantry. This is essential: 1st. As it familiarizes them with the habits and movements of troops wherewith they act in conjunction on real service. 2d. It enables them to come at once into battalion service, if exigency demands their incorporation. 3d. It renders familiar the movements of an enemy.

During a campaign, light troops, when not formed in regular battalions and in a populous country, are usually cantoned in villages or farm houses; and are generally without any camp equipage; their ammunition, arms, and provisions, being drawn

from the stores of the division to which they are attached. If, however, light infantry or rifle corps are embodied in battalions or regiments, or if rifle corps are attached in companies to regiments permanently, they may be occasionally encamped on the flanks of their regiments, or in camps either in the line or advance of the line, or largely on a flank in a right angle with the line. It is considered as conformable to the spirit of rifle corps that they do not carry camp equipage into the field on actual service, but that they construct huts with boughs of trees, and that in the intervals of actual service they take a tour of duty and comply in every respect with the discipline and duties of infantry.

It can never be repeated too often, nor attended to too much in the discipline of every species of troops, that uniformity in marching in the length of pace, and the unity or cadence of the step, and in quick time, is the most important part of military discipline. With riflemen, celerity of movement is of great importance, and in proportion to its importance it is essential that it should be precise as well as rapid, and invariable under similar circumstances.

The time of movement and the length of the step is the same in every description of troops that move on foot, and is to be referred to the practice of light infantry and the line. All movements to be made in paces of 24 inches; the riflemen must, however, be accustomed to take a greater number of paces in a minute than the troops of the line; the infantry ordinary pace is 76 in a minute; the riflemen when acting independently, should be accustomed to 90 paces in a minute, and more often 120.

There is one pace, however, peculiar to the rifle corps, which is better understood by Americans, under the denomination of the *Indian pace*, or Indian file step. This step or pace is required only when riflemen act alone, or are detached from the main body of the army. The rifle is then carried on the horizontal or sloped trail, and a word of command suitable to riflemen, and which is applicable to all light infantry corps in similar situations, has been adopted. It is the word "CHANGE HANDS," by which it is intended that the rifle or firelock at the trail should be thrown adroitly from the hand in which it is then carried into the other, and there held, till the same word of command returns it to the original hand.

The trail step, or *Indian file pace*, is usually made without any violence of the body, a regular constant even movement of the foot twenty-four inches at a step; and after practice, is to be performed in every position, whether in single or double ranks, in Indian file, or in open or extended order. The dressing in file to be always by the leading file. The lines dressed by the centre.

Riflemen are formed into companies of equal numbers with the battalions or regiments of the establishment. After being taught to stand, march, face, wheel, direct and oblique, and manœuvre, and to exercise with the firelock as in the infantry, they are taught the particular exercise of the rifle, which is varied in a few particulars, and bears some analogy to their immediate service. A rifleman is never supposed to leave his rifle unloaded, and contrary to the rule of the infantry, who always carry their arms on the left shoulder, the rifleman carries his, unless when he shifts it for rest, on his right side, either trailed or at the advance.

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§ 2. *MANUAL EXERCISE.*

POSITION ON PARADE.

The company being ordered to *fall in*, or to *form*, either in one rank or in two, as the officer may direct, it appears dressed and sized as in infantry, with rifles at the order.

If paraded on the flank of a battalion and in close order, the riflemen exercise like infantry of the battalion; if drawn up in the extended order, they perform their own manual; the only difference being in the single motion of the *advance*, which the riflemen in open order always execute at the word *shoulder*.

The company drawn up with ordered arms, and looking well to the front; feet near two inches apart at the heel and separated about the length of the foot at the toes, so that if a foot were placed parallel to the front of each man, their feet should form a triangle with open points of two inches broad. In this position they receive the precaution,

Attention.

1. At this word the eyes are thrown briskly to the front without moving the body. If the officer requires it, a fugleman advances far enough in front to be seen without difficulty by the whole company.

Advance arms.

The right hand seizes the rifle at the swell, raises and brings it to the position called the *advance* in infantry exercise; that is, the right hand, with the two first fingers under the guard, and the thumb over the guard; the third and fourth fingers behind the stock, so that the cock may rest upon the two lateral fingers; the right arm hangs at ease, not so much as to incline the body; and yet so free that it may be sunk two inches if required; the left arm hangs at ease with the fingers extended, so that the middle finger may feel the seam of the breeches. The barrel of the rifle rests in a perpendicular position against the shoulder, and the but pressing gently against the thigh.

THE COMPANY WILL PREPARE TO LOAD.

Riflemen must be at first accustomed to make ready and take aim, methodically, and thoroughly practised in it; because they are seldom in a situation in action to fire by word of command.

The officer will now order out the fugleman, if he thinks fit, and then caution the company to wait for the words of command.

On which the fugleman (if any) steps forward; if the loading is to be with cartridge, it will be so ordered; if with loose powder, the word will be,

Prime.

1. The rifle is thrown by the right hand into the position of the *recover* in battalion exercise, and held with the right hand at the small; the left hand in front of the swell, gently supporting the rifle in its perpendicular position.

2. Quarter face to the right, a segment of about four inches from the parade front, and at the same moment the rifle is brought down by the side, the muzzles in a range something above horizontal; the but resting against the right hip; the left palm supporting the rifle at the swell; the right thumb is placed against the hammer, the hand with the knuckles upward, and the right elbow close to the but; the lock inclining a little toward the body to receive the priming.

3. The hammer is pushed up by the right thumb; the right hand seizes the cartridge with the three first fingers.

4. The cartridge is brought to the mouth, and the end twisted off with the teeth.

5. The priming is then shaken into the pan, with the thumb and first and second fingers; the pan is shut by the third and fourth fingers; and the right hand slides behind the cock, and holds the small of the stock freely.

Load.

1. The rifle is gently canted in front of the body by the right hand, the but is brought to the ground between the two feet, by sliding gently through the left hand, barrel to the front.

2. The left hand seizes the rifle near the muzzle, the thumb stretched along the stock; the but is placed between the feet, the barrel and stock at the swell between the knees; the powder is put into the barrel, and the *wad* entered; the ramrod is seized with the fore finger and thumb of the right hand, the back of the hand towards the body.

3. The ramrod being drawn out by the right hand, the left quits the rifle, and grasps the ramrod the breadth of a hand from the end, the head of which is then sunk about an inch into the barrel.

4. The wadding being forced down with both hands, the ramrod is drawn and returned, and the rifle is seized by the right hand below the left. The right hand brings the rifle across the body to the right shoulder in the advanced position, when the left hand is drawn briskly away.

Ready.....Aim.

The rifle is brought to the recover as in battalion firing.

Quarter face to the right, throw the rifle gently into a horizontal position to the front, and let it fall upon the palm of the left hand at such a distance only as will give easy support; bring the soal of the but into the hollow of the right shoulder, and at the same instant the right foot is thrown about eighteen inches behind the left, the left knee rather bent, not stiff, but firm; the body inclined well forward; the neck bent so that the right cheek rests on the but, the left eye closed, and the right glancing along the barrel, takes aim through the sight; the right hand grasps

the piece at the small, while he fore finger is placed on the trigger. As soon as the rifleman has fixed on his object, he fires. In exercise he fires at the word only, until well practised in the firing motions; but as soon as perfect he fires without waiting for the word of command.

Fire.

As soon as the rifle is fired, it is brought to the priming position, unless the word *recover* be given, or the bugle signal to *cease firing*, which is to be considered as a command to *recover arms* and *half cock*, which is followed by

Advance arms.

This motion is the *advance* of the battalion exercise. At the same moment that the right foot is brought to its first position, with the right hand, bring the rifle briskly from the *recover* to the right side; the fingers going at the same instant under the guard; the thumb over the guard; the left hand keeps an easy hold of the rifle and aids in crossing the body with the rifle till it is placed in the proper position, the hollow of the shoulder.

Order....arms.

Seize the rifle with the left hand briskly across the body even with the shoulder, raising it about two inches with the right hand, which is then disengaged from the guard below, and grasp the rifle firmly round the muzzle. The left hand is then disengaged and brought to its former position on the left thigh; while with the right, the rifle but is brought to the ground in a line with the point of the right foot. The wrist gracefully bent and the elbow easily pressing the rifle against the body; the right hand is then thrown in front of the rifle, the fingers extended straight downwards, the thumb behind the barrel.

Riflemen are never required to fire with cartridges but when acting in close order, which, though it often happens, is not precisely their province in action. Whenever it is practicable, riflemen will load with powder measure and loose ball. They must be first taught to load and fire with cartridge like infantry; after which the principal instructions for recruits will be how to load with loose ball, and to fire at the target.

§ 3. PRACTICE FIRING.

The firings of rifle corps may be divided under three heads: *fixed* or *standing* fire—*advancing*—*retreating*.

Fixed or standing fire is practised not by platoons, nor in ranks, as in battalion, but in a mode peculiar to the uses of riflemen, and calculated to obviate the disadvantages discovered in platoon firing.

When the recruits are sufficiently perfect in firing by the distinct and separate words of command, they should be accustomed to go through the firings with the following words of command only:

Attention.

Load.

Aim.

Fire.

No single motion should be omitted in the firing exercises, as it is of more consequence that a rifle should be properly than expeditiously loaded.

Half cock.

The rifle is brought to the recover, and half cocked.

Shut pan.

This motion is executed in the position of the recover.

Trail....arms.

The rifle is thrown handsomely into the right hand to the right side, caught at the swell; and the arm lowered to its length without straining; the rifle is held balanced upon the four fingers, the muzzle as high as the breast, but direct to the front....the hand by the right side....elbow slightly bent.

Order....arms.

The right hand performs this motion, by gently but briskly throwing the rifle into a perpendicular position, in a line with the point of the right foot, and there gently suffering the weight of the rifle to bring the but to the ground....the fingers thrown in front, the thumb behind the barrel, the arm gently bent.

After the young rifleman has perfected himself in the foregoing parts of discipline, he must be constantly taught firing at

a target, which should be at least five feet diameter. If smaller, the unpractised man would be at first discouraged, as some may miss it at first; it is also necessary to have it so large that the range of the rifle may be known whether it throws the ball to the right or to the left; and if it were too narrow, he could not ascertain this. A target of proper size and painted in circles, is easily hit, the rifleman sees the fault he has made, and learns to correct it. He must be taught to fire at a target without a rest, for if he accustoms himself to make use of a support, he will rarely fire true without one; but as this method will be rendered easy by practice, he should begin by firing at fifty yards distance, and increase it by degrees to 100, 150, 200, and 300 yards.

Many of the Pennsylvania rifle corps practise firing as they advance in single file, in the following manner: A hat, or any other object of similar size, is placed on a staff or fence post, four or five feet high. The rifle company are formed into Indian file, and are put into the short pace of the Indian, with the rifle at the horizontal trail. They pass the object in a circle, leaving it on their left and firing successively as they pass in that direction. They move in a circular course, and after firing a number of rounds, they are faced to the right about, and pass and fire at the object on their right side. The firing from the right is from a halt; the firing from the left is practised without halting.

The rifleman must be made acquainted with the nature of sights, and the aim of the rifle; how to load with loose ball, to force it dextrously into the barrel, so that it shall lie close upon the powder without bruising the grains; he must be taught how to use the *plaister*, which is a piece of greased flannel, fustian, or soft leather, to facilitate the passage of the ball into the barrel, and clean it.

He must be taught to mark every shot fired at the target which strikes it, and to observe whether it be pointed too high or too low....too much to the right or to the left, so that he may correct his fire accordingly. He should weigh his powder, and note the difference of effect with a greater or less quantity of powder, and how far the quantity of the powder affects the shot.

The officers of rifle corps should be as expert as the privates, and should be competent to instruct, as well as correct error.

The proper charge of the rifle must be particularly attended to; a measure provided to contain an exact charge, attached to his powder flask. And riflemen must be practised to load and to fire as they lie on the ground, and to fire from behind trees and stone fences, and in every species of covered ground.

§ 4. OF FIRING ON THE SPOT.

In the close and extended order, the ranks fire alternately, it being a rule, that the whole are never to be unloaded at the same time.

The signal being given to *commence firing*, the field officers and staff, retire to the rear; the subalterns remain in the line; the captain or first lieutenant always on the right.

In close order, the senior officer in the rear of the company or division which is ordered to fire, gives the word.

On the signal for *commencing firing* being given, the two right hand files of each platoon or section, according as the company may be told off, are immediately to take three paces to the front; the two in their rear stepping to the right of their file leaders, and each take aim and fire; come about by the left and resume their positions; and so on through the whole company.

This mode of discipline is necessary to prevent the whole from being unloaded at the same time; and the uniformity and continuity of fire are thus made incessant. When it is required that the firing should *cease*, the signal of the bugle previously determined for that purpose, is given; and after this not a shot should be heard fired.

The officer must remain invariably in the line during this firing, and on no account to stir from the spot. When the signal for *ceasing fire* is given, and *every man loaded* and *shouldered* (or at the advance) the officers dress their platoons.

Attention.

At this word the right hand file (that is the man on the right in the front rank, and the man on the right of the rear rank) of each platoon, take three quick paces forward and halt, the rear man steps out ten inches to the right of his file leader, but on a line with his own position.

When he has fired, he quits his hold with the right hand, and in facing to the left about, swings the rifle in an horizontal

position with the barrel downwards, and steps briskly into his original position in the rank, and fronting by the left about, he brings the rifle into the position of prime and load; half cocks, and proceeds to load, going through the motions as before without further word of command.

The practice of exercise of rifle corps is usually regulated by the *bugle horn*, for which there are certain staves of musical notes within the compass of that instrument, determined by the commanding officer to be the signals for performing or ceasing to perform the several parts of discipline. A scheme for this purpose is annexed to this work in musical notes, and new signals may be easily added.

§ 5. ANOTHER METHOD.

As soon as the rifleman is perfect in the firings, he is instructed in the signals by the bugle, so that he may know when to commence or cease firing.

Front rank....ready....aim.

The fire may commence from right or left, and continue to the opposite end of the rank; each loading after his fire; as soon as half a rank has fired the word is given; and they then continue to fire with deliberation, loading carefully, and firing without perturbation.

Rear rank....ready....aim.

Every man selects his separate object, and fires at his own discretion; when he has loaded, he touches his front rank man as a signal for him to do the same; and as soon as the front rank man has fired and loaded, the rear rank man fires again; and thus the fire is kept up briskly, but without hurry or confusion, until they *cease firing*.

This method is, by some, considered preferable to another which has been practised by some corps, of moving a few files forward, noted as a matter of discipline in the preceding section; as in this mode the line is preserved in better order and the impression is greater. But both are proper in suitable circumstances.

In extended order the signal to *commence firing* being made, the front rank begins without waiting for the word from the officer; but the men observe the same rules of alternate firing and loading as in closed ranks.

CHAP. V.

FORMATION OF THE COMPANY.

§ 1. IT now becomes necessary to treat of the order of depth. The company being drawn up in single rank, as usual, and the parade being dressed and steady, the whole ranked and sized, as in Chap. II. receive the precaution:

Attention.

THE COMPANY WILL PREPARE TO EXERCISE IN DOUBLE FILES.

Tell off.

One, two....One two.

The right hand man speaks out in a clear quick voice, *one*, the second *two*, the third *one*, the fourth *two*....and so on to the left.

The order of formation is, that the tallest men shall be on the right and left of the rank, and that the files of the rear rank shall be successively taller than those of the same file in front; this must be accomplished in a soldierly manner.

A moment's reflection will show that if the files be now formed out of the company, ranked and sized from the flanks to the centre, the common way, that the men of the front rank on the left half of the company, will be taller than the men in their rear, while the contrary will be the case on the right; it will be necessary to obviate this by a more accurate method. The company being told off, the centre is found, and the following instructions and commands will be given:

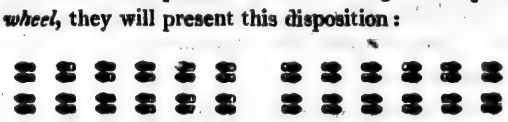
The company will wheel into double files from the centre outward; the odd files will in this movement be the pivots of the right half platoon; the even files the pivots of the left half platoon; so that when the words....*right* and *left*, are given, the even files of the left half platoon face to the left, and the odd files of the right half platoon face to the right. They receive the precaution:

Attention.

TAKE CARE TO WHEEL INTO DOUBLE FILES FROM THE CENTRE OUTWARD.

Mark time.
Sections....by files....
Right and left....outward....wheel.

This will be the disposition at the word *right* and *left*; at the word *wheel*, they will present this disposition:



Thereupon they will receive the word,

Front face.

And they will present this disposition:

This position places the two sections with an interval: to bring the rank to consistency, they must be closed to their proper distance by the side step.

By the side step.
To the centre....close files....march.

This is performed by lifting the left foot, moving that foot on the side towards which the file closes six inches at a time. Thus the files on the right step six inches to the left, and bring the right foot close up to the left; the files on the left, step six inches to the right and bring up the left foot.

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§ 2. The company is now formed in double file faced to the front, and it is necessary to put it in motion.

They present the following disposition; and are put in motion in the same manner as in single file. The principal difference in modern discipline is, the care that is required in making all wheelings upon the principle of the *pivot*, by which

is to be understood, that every man who is at the point upon which a wheel is to be made, is called the pivot; and so must every man be, whatever be the number of men in the rank, section, or platoon, above one. This will be exemplified in the two views of a wheel to the right.

Attention.

THE COMPANY WILL TAKE CARE TO WHEEL TO THE RIGHT.

Mark time....

The right....

This word is to the single man on the head of the column, and on the right, the *word of execution;* he must, as is represented, face to the right, while all the rest wait for the word

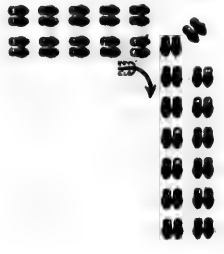
. . . . . *Wheel.*

Upon this word the man who had faced steps out, and his left hand man wheels up on his left side; and so every right hand man, on coming to the same ground on which the first man stood, faces briskly to the right, and marks time a pace till his comrade on the left gains the same front by a wheel on his left; then they dress and advance. The following figure exemplifies the operation of the wheel, conformably to this rule.

The officer will signify that all the movements now are to be made in two ranks or double files; and that the intimation of *double files,* will now cease to be used.

Right....wheel.

Forward....march.



§ 3. After the young riflemen are sufficiently exercised in marching, wheeling, and shooting with cartridge, and then with loose powder and ball, in small sections, they are formed into companies in two ranks, and told off by the voice in the same manner as infantry, and they are taught the duties to be performed in larger bodies....extending front....advancing.... retreating....closing either in front or a flank file....or firing in their position.

The file may extend from right, left, or centre, according to circumstances, in any number of paces, and of which the commanding officer must be the judge. When in two ranks the men of the rear rank conform to the movements of their file leaders.

The usual distance of extended order is one or two paces, according to the front to be covered and the number to cover them. If it be required to extend to a greater distance, either to cover the front of a corps, to mask a manœuvre, or any other purpose, it is intimated by the officer before the signal is given for performing it.

In extending to a flank, upon a signal or word of command for that purpose, the whole face to that flank except the first or last file, and step off in quick time with arms *trailed;* the front rank being well closed up, and the rear rank looking over the left shoulder in order to halt their file leaders; for on the latter will depend that they halt at the proper distance. The platoon or company being formed in close order, in two ranks, and is required to extend from the right, and the distance to open is small, the words of command will be given, preceded by the order for the *side step*, but if the side step is not mentioned, the whole company excepting the right hand file (that is the right hand man of each rank) face to the left, and the number of paces at the extension is mentioned at two or more paces distance.

If at two paces, each of the files that are faced to the left, step out shortly in time, and casting an eye over the right shoulder, measures with his eye the two paces distant from the file behind him. Having reached the point, they either face successively or mark time and front together. Being faced to the front extended, the rear rank will step out one pace to the right, so that they cover the interval of the front rank. Two paces is

the most usual distance for the extent of rifle corps; the interval affords the rear rank an opportunity to march up and fire without impediment.

Where riflemen are numerous, they should be formed in three ranks, and the third rank composed of the men most expert at loading....the third rank might in action load for the two ranks in front.

The following will convey a more distinct idea of the company at the close and extended order. The rank and file consists of 24 men, drawn up two deep....12 files being in front.

12 11 10 9 8 7 6 5 4 3 2 1

To the left....extend.

At this word all but the right hand file, or *pivot*, step out six inches to the left, and present the following disposition:

As soon as the company is perfect in extending with precision, the extension may be performed by signal; if there be no bugle, signals of another kind are easily devised with the drum, colors, or flags.

Closing may also be performed by word or signal, every man facing to the point ordered, and shouldering rifles as they come up and dress. Care must be taken at all times that the files do not intermix, and that every man knows and follows his leader. See plates 6 and 7.

On the signal to *halt*, the whole halt and dress. If the chain is to fire, the signal to *commence firing* is given; on which the firing is carried on in the mode prescribed in the preceding part of this chapter; till the signal is given to *cease firing*.

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§ 4. To fire upon the spot, or by the signal, the practice of some corps is for the right hand man of each division to advance three paces, select his object, and having fired, return to his place. The other three men perform the same successively, and by this means the fire is kept up without intermission as long as required. Another mode is for the ranks to fire alternately advancing and retreating as when skirmishing, two men of the front rank of each division of the chain always moving together.

The rear rank steps two paces to the right in order to be able to fire between the intervals of the first rank if necessary, and without impediment.

The officers and non-commissioned officers, in giving commands and signals, never move out of their proper places; they are at all times the points upon which the ranks must dress. In every other respect the rules which relate to firing in advancing must be followed.

When the company or platoon extends from the left, the word is given:

To the right....extend.

The whole, except the left hand file, step six inches to the right; and the rear rank acts as in the corresponding movement.

When the platoon extends from the centre, the word is given:

From the centre....extend.

The centre file, front and rear, stand steady; the files on the right step to the right; those on the left step to the left; as in the corresponding movements.

The following shows the front rank in close order, the rear rank extended:

If the platoon is extended at the common open distance of two paces and no more, the arms are brought from the trail to the shoulder; but if extended more than two paces the trail is preserved.

Both ranks dress, as soon as they are fronted, by the point from which they extended; and the rear rank men take half a pace to the right, if necessary, to fire. In marching to the front, however, they again cover correctly in the manner of infantry.

The charge of the rear rank in extending in this kind of service is important, as should they not halt their front rank men properly at a due distance, the line may be too extensive, or not enough extended. Some parts may become too weak, and the design of the commanding officer may be defeated by this neglect, or by any pertinaciousness of a subordinate person in deviating from the strict letter of the order given. See plates 6, 7, 8, and 9.

At the signal to *retreat*, the whole chain faces to the right about and retreats in ordinary time. On the signal to *halt*, the whole chain halts and fronts. If the signal is given to *incline to the left*, they face to the left, and take ground accordingly; if to *incline to the right*, they obey the signal likewise. Should the ground require it, or any other proper cause, an oblique movement to the right or left in such cases is proper. On the signal *to close*, the whole closes to that point from which the signal is given.

Should the two flank platoons of a corps be ordered to form the chain, or extend themselves, as circumstances may require, in order, by that means, to mask the formation of a battalion, or to keep the enemy at a distance, in a country where his front is difficult of approach, the two flank platoons will advance in quick time the distance which may be directed, and when arrived at the spot, the right flank platoon forms the chain to the left, and the left flank platoon to the right, proceeding according to the directions already given for extending and forming the chain. At the signal given to *close*, the platoons close to the point from which they extended, and both resume their position on the flank of the corps as quickly as possible. See the plates.

The chain may change in front, previously facing to either flank, and forming a new alignment; the reserves at the same time filing from the right or left to the front, and taking up a parallel position in its rear. Skirmishers may do the same.

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§ 5. The movements of riflemen, it has been observed before, are conducted in a method more open, or in a looser or more extended order, than the movements in the column of attack, column of march, or the line. Their habitual order is in two ranks, or files of two deep; and their distance, when not manœuvring in the close order, is 36 inches front and depth for each man. This is their uniform parade distance; which gives each file a front of three feet, and a clear interval to each file of six inches on each side. The distance of the rear rank from the front will be two feet; so that the two ranks of a rifle corps, or the flank of a battalion formed in the order of three in depth, the rifle ranks will dress with the front and rear rank of the battalion, and 50 files of riflemen will occupy a front of

150 feet; or, 18 feet more than the front of two companies of infantry in the order of three deep; and equal to one third more than the front of a company of infantry two deep.

The officer will always have a discretion in so arranging the distance of ranks, as well as the position of riflemen on parade, as well as on service; and it is the duty of the rifle officer to obey such dispositions promptly; no corps requires more implicit and prompt obedience to orders, than rifle corps; the fate of a battle so much depends on this species of troops, that they should never be unprepared....never suffer a surprize; and their actions should resemble the lightning, the flash and the stroke together, or the stroke first.

All their movements should, therefore, be quick, they should also be short and by the most direct route to the object; for which reason it is particularly essential to them, that they acquire the diagonal movements according to the new method; they consist of a simple change of the position of the body of each individual, in a motion which corresponds with the *wheeling* of the rank in the ordinary way.

This mode of movement is illustrated in the plates I. and IV. fig. 3, of each, and is explained by the following diagrams:

Let it be supposed that a company is required to be brought into a position similar with that produced by the words....*Right wheel;* instead of the movement in rank in the old mode, each file quarter faces to the right, and moves on a *direct line* diagonally, instead of circularly, to the point required.

The words of command to be given in this care, are as follow:

Attention.

THE COMPANY WILL FORM UPON THE RIGHT BY THE DIAGONAL MOVEMENT TO THE FRONT.

Mark time.

Files....right quarter face.

Forward march.

Mark time....front....dress....halt.

At the word *quarter face*, the company will present this disposition:

The following diagrams show the different modes of wheeling; and this new oblique method, fig. 1, shews the *curved line* upon which each file moves in the old method; fig. 2. the quarter facing movement, shows the diagonal lines upon which each file moves to the point at which it is directed to *mark time...front....*and *dress.*

Fig. 1.

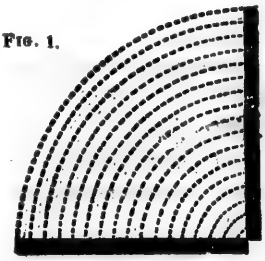
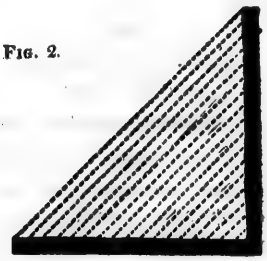


Fig. 2.



This diagonal movement enables riflemen to fire, as they come to the required point, and in succession; so that instead of waiting until a whole rank is wheeled, as in the old mode, a single file may commence the fire the moment it gains its new front....an advantage which requires only to be stated to be seen.

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§ 6. The importance of this *quarter* and *half facing* will be perceived the more it is studied and practised; and it is susceptible of application to formations of every description. In the preceding drills, the advancing by files from the flanks of companies, and by heads of sections, have been illustrated; these evolutions should be now practised by eblique movements, or quarter facing and moving on diagonal instead of curved lines. The plates I. and IV. in their third dispositions, each show the operation.

Fig. 1. represents the company in two ranks as faced outwards, all but the front flank men of each rank, who act as the pivots.

Fig. 2. represents the company as advancing to the front by the heads of sections.

Fig. 3. represents the company as forming to the front by *quarter facing* inward, and moving on the oblique line to their original position, in double ranks.

Retiring by the flanks is only reversing this evolution; and the movements into perpendicular rank, or into horizontal rank, may be formed in the oblique line.

The words of command given in these movements are as follow.

Attention.

THE COMPANY WILL MOVE FROM BOTH FLANKS, BY DOUBLE FILES, TO THE FRONT.

From the centre....outward face.

The right hand man and the left hand man only keep their positions....and when the sections move to the front, the *rear rank* will form the outward ranks in file.

When they are to form front again they receive the precaution:

TAKE CARE TO FORM FRONT BY OBLIQUE MOVEMENT TOWARD THE CENTRE.

Inward....quarter face.
March....mark time....halt.

---

§ 7. The next will be movements from the centre. The principle is precisely the same here as in the preceding, and is illustrated in plate IV.

The words of command are given in the following form:

Attention.

THE COMPANY WILL ADVANCE BY DOUBLE FILES FROM THE CENTRE OF HALF PLATOONS.

To the centre....face.

The whole face to the centre of half platoons, excepting only the left hand file of each right section, and the right hand file of each left section, who become the pivots, and accordingly do not face to the centre, but keep their places faced to the front, as in fig. 1.

As soon as they receive the word *forward*, these two centre flank men, or pivots, *quarter face* to their outer flanks, and move a pace, so as to admit the rear rank files to advance upon the same front, and then front with them, as may be seen in fig. 1, plate 4.

Fig. 3, in the same plate, shows the mode of forming to the front by an oblique or quarter facing, and moving on the diagonal lines, to the same front as the heads of the columns of half platoons previously formed.

In all movements, the light corps must be accustomed to augment or diminish front with rapidity; the rule with light corps differing in this particular from the battalion, that the infantry of the line never lose the *tact* or *touch*, while light infantry move in a looser order, and do not so much depend on the *touch*, as on a perfect knowlege of this method of movement, and a practical habit of executing it; a difference which clearly shows that if there ought to be any difference, the discipline of rifle corps should be more laboriously studied and practised than that of the infantry.

Riflemen must be accustomed to form double files from the rank in Indian files, while on the march, and to reduce double to single files.

They must be accustomed to break off into sections from double or Indian file, marching upon the named flank, and to either the right or the left; so that, if a rank of double files were on its march, the word being given,

ADVANCE BY SECTIONS OF TEN BY THE RIGHT....AT FORMING DISTANCE....

Sections of ten....right quarter face....march.

In this operation the first ten files would pursue their course as before, the next ten files would quarter face to the right, and move to a point *ten yards*, or the front of ten files, on the right of the first section, the third section would move to a point *twenty yards* upon the right, and so on every section a distance on the right equal to the front of its depth or ten files; the disposition of the corps thus moving would exhibit the same appearance as a column of infantry of ten files front, in open order, faced to the right; for the left section would then be its head in the original order, in rank entire, the method to be pursued would be found in the following commands....

THE WHOLE WILL TAKE CARE TO RESUME THE ORIGINAL DISPOSITION AND FRONT.

Mark time.

THE RIGHT SECTIONS WILL MOVE BY THE REAR OF THE LEFT SECTION IN INDIAN FILE, AND FORM UPON THE LEFT.

Left section....left quarter face.
Upon your right file form front....
March....dress....halt.

In all movements of light troops, and particularly in those in which ranks are broken, and the order at times reversed, as in the above instance, much will depend upon the skill and quickness of the serjeants, one of whom must always place himself at the head of any leading section; and all sections must be equalized without reference to the serjeants; who will lead one or another section as it advances; but there must always be a serjeant on the flank of every company, unless when the order is reversed, when the serjeants must take the lead of the temporary head of file in section. The captain of riflemen must be at all times on the right of the leading file, whatever may be the disposition of his company.

§ 8. DUTIES AS LIGHT INFANTRY.

The movements of rifle corps with an army are in advance or on flanks, and in various dispositions analogous to the operations of the line, but in their own peculiar mode of movement. On the parade drill they learn the side step, after the manner of the infantry, by which the rank or ranks are opened from the centre on either flank, or closed to a flank or centre as occasion may require. This step is performed, if the opening is to the right, by keeping the left foot firm, throwing the right foot six inches to the right, and bringing the left foot close up to the heel; then stepping out to the right again with the right foot until the proper opening is obtained; and so with the left foot if the extension is to the left. If the opening between the files is exceeded two feet, it is preferable to face the men towards the points they are to open to, and from thence from either as they reach the required distance, or keep them at marked time and front them all together. As tirailleurs they extend to six or eight feet distance.

The inspection and the review of riflemen are conducted upon the same principles as if they were infantry of the line.

The method of posting officers varies nothing from the infantry practice, but in the posting of the officers in action; the reason of this is to be found in the peculiar character of the troops, and its necessity is pointed out by the more frequent advance of the rifle corps in long and extended lines.

Each captain of a company is the point upon which the several companies must respectively regulate their movements. A battalion or a strong body of riflemen, marching through a country unattended by other troops, must look to their own safety. In such circumstances they should pursue the mode of march of infantry of the line, by proceeding in orderly columns, preceded and followed and flanked by detachments, in the nature of advance guard, rear guard, and skirmishers, and they must take every precaution to avoid surprise. Their manœuvres on the defensive, if forced to resort to it, should be upon the principle of infantry; but they should throw out larger parties, and at more numerous points, than is usual with infantry, both to deceive the enemy by attacking in an unusual manner, and because their particular discipline is better calculated to be impressive in that way than in columns of manœuvre.

In retreating across a plain, the ground, their own force, and the force that attacks, must regulate their dispositions, and their success will depend on the skill of the commander.

There are various modes of conducting a retreat, in such circumstances. 1. In line. 2. By double order of files from the flanks to the rear. 3. By the order of four files from each flank to the rear: and, 4. By the various dispositions of the hollow square, or the wedge.

For example: 1. A regiment or battalion may advance in line, halt, and the right platoons or companies may fire in close or alternate order, as directed.

2. A battalion may retire in line, halt, front, and fire by left platoons in the loose order or tirailleur fire.

3. A battalion may break into open columns, and then take any position, in any given mode.

4. The echellon movements, always so essential to light troops, should be constantly practised.

5. The right and left grand divisions may extend, and fire in that order, and any parties deemed convenient, detached to

skirmish, form ambuscade, or make reports of ground and water courses, close or clear country.

Rifle corps, especially their officers, should study with care the uses to which their discipline is applied, and how they appertain to the line.

They should know how to alter their mode of march or manœuvre with the most ease to the men, and with the most expertness in taking the necessary positions or points. Their skill in manœuvring their own corps, when moving in concord with the line, but not in the line themselves, produces a beautiful effect in review, and is very imposing aud useful in real action. In all other respects they should acquire the steadiness and coolness of the battalion discipline, with the alacrity and quickness of the light infantry, the patience of the sapper and pioneer, with the intrepidity and agility of the backwoodsman.

§ 9. OFFENSIVE EVOLUTIONS.

Light troops act offensively in general, but on special occasions defensively. They may also be included in the order of battle in detached divisions or companies, or as in the French dispositions occasionally as parts of the line; or they may be left wholly out of the order of battle, and reserved for particular auxiliary services, for a *coup de main*, or for diverting the attention of an enemy from the manœuvres of the main army.

The general duties of light troops may be simply stated under the following heads:

1. To form advanced parties and patroles, where an enemy is expected or military movements apprehended.

2. To occupy defiles, and elevated positions, and prevent surprises, or to communicate intelligence of the positions and movements of an enemy.

3. To annoy an enemy drawn up or moving in order of battle, by disconcerting its movements, and depressing the advanced posts and patroles of an enemy.

4. To take an enemy in the rear or on a flank by surprise; and to turn a flank by rapid and bold enterprises in action.

5. To harrass an advancing enemy on a march, seize magazines and convoys.

6. To forage and cover the movements of cavalry foraging parties.

7. To form ambuscades, and other bold enterprises.

8. To occupy bridges and passes in advancing, and to destroy bridges on a retreat.

9. To harrass an enemy on his retreat.

10. To rally from a dispersed order in cases of exigency, and act as solid columns or lines of manœuvre, like infantry.

It is a general rule in relation to light infantry, that they are to act whenever required with light cavalry or hussars; and that the movements of light infantry and light cavalry should be co-operative, and reciprocal; their services on so many occasions being essential to each other.

If the signal be given them to *close*, the skirmishers close to the position in the reserve, and retreat in order to their proper point; from which, on the second signal to *close*, they all fall back on the rear body in good order, and take the station assigned them in the line or order of battle.

Should the skirmishers meet with a superior force, which prevents their retreating in good order, and according to established rules, they must of course resort to the most effective expedients to make good their junction; taking the precaution to clear the front of the main body towards which they are retreating, in order to render their movements easy and more secure. The moment the rifle corps clear a portion of the front line, that portion fires, to cover their further retreat; and the whole line opens to secure them. The arms of reserves are usually either *ordered*, *slung*, or *supported*, while those of the acting skirmishers are usually *trailed*.

When covering the front of a line to mask its movements, their fire must be incessant and heavy; and, when practicable, the whole of a company should concentrate their fire on some single point of the enemy's line, so as to make a heavy impression, and thereby disturb its order, and divert attention from the actual manœuvre thus intended to be covered.

CHAP. VI.

§ 1. FORMATION OF A RIFLE REGIMENT.

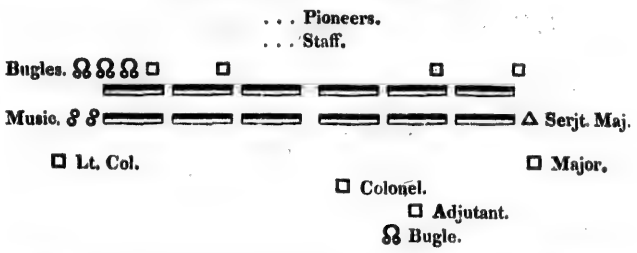
THE rifle corps, for the observance of order in military arrangement, should be organised on the same principles as a regiment of the line. The French, who have carried military arrangements to the greatest perfection, have half brigades of riflemen, with a *grenadier* company to each battalion, who act as flankers to every description of military men on foot. This organization is founded on the power and principles of emulation, and the graduated *esprit de corps*.

An American rifle regiment should on this plan consist of two battalions, or ten companies, on the war establishment, consisting of one thousand men. Two of these companies should be *select*, and it should be an object of emulation in the regiment, to be enrolled in these companies. The staff of every description the same as the infantry; each company one captain, one first, one second, and one third lieutenant; the regimental staff a colonel, lieutenant colonel, major, and adjutant.

A regiment is disposed according to some established rule of precedency, which is in itself a matter merely arbitrary; but companies as they join are ranged in numerical order from right to left; and when all on the ground, they are countermarched, the even companies by the rear, the odd numbered companies by the front, to their proper positions in the ordination of the regiment. The two battalions being formed, are told off into four grand divisions, excluding the two *select* which may be, at the discretion of the commanding officer, formed into a fifth grand division on the right or left. In which case the company that belongs to the left should be posted on the left of the company that belongs to the right, if marched to the right; and the company that belongs to the right, should be on the left of the whole if carried to the left.

The five grand divisions should be told into ten sub-divisions, and twenty platoons, and forty sections; but no other sub-division is necessary unless files of march, or ranks in front.

BATTALION IN CLOSE ORDER.



At close order they are formed in two ranks at one pace distant.

In the absence of the officers of the first class, the serjeants of companies take post as follows: the senior serjeant on the right of his company, which is divided into two half platoons; one serjeant on the flank of each front rank; the remaining non-commissioned officers on the rear flanks, supernumeraries form an extended rank in the rear, at four paces distance.

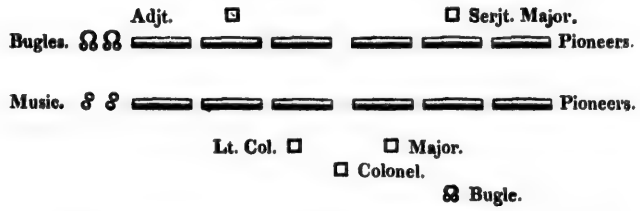
Captains and subalterns are present....the position of the captain is on the right of his company, covered in the rear rank by a serjeant. The first lieutenant on the left of the front rank, covered by a serjeant.. .the serjeants are posted with regard to merit in the first instance, and where of equal merit, according to seniority of appointment. The officers commissioned and non-commissioned not in the ranks, form a separate rank extended at four paces in the rear, when halted or marching in line....one pace only on the right of the line, the serjeants on the left of the column.

The field officers and adjutant are always mounted and in front, when engaged in firing....the lieutenant colonel ten paces on the right and front....the major ten paces on the left and front....the adjutant as aid to the colonel, and a bugle on the rear and right of the colonel....the serjeant major in the rear of the supernumerary rank or on the left.

The quarter master, pay master, surgeon, and mate....with such artificers as may be attached to the regiment, are twelve

paces behind the music. A bugler with the colonel or commandant.

BATTALION IN OPEN ORDER.



When a regiment of riflemen takes open order, the field officers, excepting the commandant and adjutant, dismount. The captains advance two paces in front of the centre of companies, and the subalterns take post dressing in front of their respective platoons, in a rank with their captains. The line of officers is dressed by the senior field officer on the right, who takes care to dress the front rank; the adjutant takes care of the rear rank with the aid of the serjeant major.

The music moves through the centre and forms one pace in front of it, in rank entire. The buglers take post on the right of the battalion, unless otherwise directed by the field officers.

The artificers move into the former position of the music.

§ 2. GENERAL RULES FOR EVOLUTIONS.

With a view to the operations of a regiment or battalion, it is not practicable to define with precision the number of men that may be required for a given service, as it depends on local circumstances and the judgment of the commanding officer. The same is to be said of the proper distance to advance.

It is better generally to detach from the flanks, than from the centre; the practice of advancing the left or right half platoons of companies, and thus leaving intervals, is bad upon principle, and ought to be avoided, though necessity may sometimes authorise it. But the interval made should not be long left open.

This evolution is required only when the battalion or regiment is to attack, or may have occasion to use the whole of its fire; the skirmishers therefore will not wait for another, but

will retire as fast as is practicable through the intervals; but the quarter platoons will continue formed, and move with a quick but firm step to their proper positions.

The officers of the detached platoons must direct their principal attention to combine in such a manner, the movements of their half platoons and skirmishers, with those of the battalion or corps, as always to keep parallel with them, and to preserve the proper distances of the extended order which they have been directed to take.

It may happen that an entire company shall be required to extend itself for the purpose of covering the front of a corps, without leaving any part formed as a reserve. In this case the company will trail arms, advance in close order, and when arrived at the *point blanc* distance, will extend itself with due celerity. If the company is detached from the right wing, it will extend to the left; and so of the contrary wing, or centre; as is directed in § 3. of chapter V. and illustrated on the plates 1, 2, and 3.

When a company, battalion, or regiment, has been formed for an attack in the above manner, and the *alarm* signal given, the skirmishers retire with celerity, through the intervals; in the rear of which they form and wait orders.

Should it be necessary to retire across a plain; on the battalion or company going to the left about, the right and left flanked files of each platoon remain fronted. In retreating the battalion will carefully preserve the intervals made by the above files, whose business it is to extend themselves to cover the retreat, following at the distance of twelve or twenty paces, and by their fire endeavoring to keep the enemy's flankers off. For this purpose riflemen should be practised in the Pennsylvania method of priming and loading, and firing on the march. During such manœuvres of retreat, it will be particularly necessary that coolness and firmness be inculcated with riflemen, that they may render their fire effective, prevent a waste of ammunition, and avoid leaving the whole unloaded at the same time.

If attacked by cavalry, the signal for *halt* being first given, the battalion or regiment fronts; the signal for *retreat* being given, the skirmishers fall into their respective places in the line

If the corps is to continue its retreat, it will face to the right about; the skirmishing files remain fronted as before. When the retreat has been effected to the proposed point, the signal to *halt* being given, the corps fronts, the skirmishers are called in, and the whole dress by the centre.

§ 3. OF ADVANCING.

In advancing, the signal being given to *advance*, it is followed immediately by the order *fire*.

The men of the rear rank advance by the right of their file leaders, to the front ten paces, *make ready*, mark their object, *take aim*, and *fire*, without command.

The officers being provided with a whistle for signal, with which the men should be previously exercised; that officer who is stationed on the flank of the front rank, gives the signal for his rank to move forward in like manner ten paces, passing by the left elbow of the rear rank man; and so alternately.

The front rank is under the guidance of the subalterns, and the rear rank under the most expert non-commissioned officers; the captains of companies are between the ranks, and direct the whole as occasion requires.

As soon as the men have fired, but not before, the proper officers dress their ranks quickly as possible and correct their distances where necessary.

After the signal to *cease firing* is given....not a shot is to be fired, and the men are *halted*.

A scheme of signals by the whistle, for riflemen, is annexed to this work.

§ 4. FORMATION OF THE CHAIN.

Riflemen, advanced in front of a line for the various purposes of tactics, are called *tirailleurs* in the French movements, from a French term signifying irregular shooters; on other occasions when employed to make discoveries and report them, called *eclaireurs*, from the celerity of their motion, and their attack coming like lightning. In their extended position they are denominated all together the *chain*. The object of the chain is to scour a tract of country, by means of a detached body more or less numerous as occasion may require; to clear woods, thickets, morasses, and enclosures, to show the way towards the advance posts of an enemy and counteract their out-

scouts, and report both their position and movements; to occupy as far as circumstances will admit, every advantageous spot or position in front, either for annoyance of an enemy, to prevent the enemy's occupying it, or to form ambuscades.

In skirmishing the men are dispersed from each other, and therefore, require a stronger reserve to guard against accidents, than a chain which consists of small divisions; small divisions must be never less than four men each, whose mutual dependence give strength and energy to their operations. Posts and detached parties must ever keep up a communication or be within view of each other. The duty of a chain is consequently more permanent than mere skirmishing parties.

Where one company only is employed, one half or three fourths may be advanced one hundred paces, to form the chain; when arrived at their ground they extend to the right, left, or from the centre, in divisions of two files each, at from six to ten paces distant from each other right and left; and the front rank man with his comrade in his rear two paces. The remainder of the company is formed in the rear, as a support, as nearly in the centre of the chain as may be. See plate VI. fig. 9.

When several companies are employed, such a proportion may be detached for this, and generally speaking for any useful purpose, as is consistent with the views of the commander.

The disposition of the chain in front being made, the signal is given to march. The chain moves forward in ordinary time, preserving the due distance or *alignment*. The section of reserve follows at fifty or sixty paces distance, to support if necessary.

§ 5. OF SKIRMISHING.

It is a good rule, that no more than half of a company of riflemen must be advanced to skirmish at one time. The other half is reserved, and formed ready to support those advanced.

Where there is only one company, the right or left half platoon according to the direction of the commanding officer, advances quick sixty paces, from whence a fourth of the platoon is advanced sixty or eighty paces more; and extends its files so as to cover completely the main body from which it is detached. See plate VIII. figures 6 and 7.

Whenever the right half platoon advances to skirmish, the right quarter platoon must be pushed on their front and extend

themselves to the left, and so the contrary half platoons extend to the right.

If the signal to *march* is given, the platoons which remain in close order, and the half platoons in advance, move forward in ordinary time and cadence with the line, and keep their intervals perfect. The skirmishers that have been pushed forward in front, conduct themselves in the same manner as in firing, advancing upon the spot and retreating.

The signal for *halt* being given, the whole halt, face the enemy, keep their positions, and cease firing. If the signal for *retreat* is given, they retreat in ordinary time in good order, and their distances will be preserved.

§ 6. DUTIES AS TIRAILLEURS.

Light troops, having performed their duties in advanced posts, previous to the commencement of an engagement, are to be posted at the will of the officer in command, and employed at his discretion. The duties of all light corps when thus advanced, have been particularly described in the preceding sections and the next chapter; and the mode of service is common to all descriptions of light troops on foot, in this department of duty. If they are advanced upon the front of the line, they according to the modern tactics accompany the *flying artillery* and *light cavalry*, or hussars, which co-operate with them. The light infantry (or rifle corps) acting as tirailleurs, or irregular shooters.

Unevenness of ground is always in favor of riflemen thus advanced, and it is their duty to take advantage of every means that offers to cover themselves from the enemy's fire while they can perform their duty in annoying the enemy. They must not be detained from taking their proper positions by any avenues or openness of ground where they may chance to be placed.

If the main body to which they are attached is about to advance to action, the proper signals will be given for the light corps to retire to their proper stations. If the enemy advances, the light corps will likewise retire in steady order, keeping up the retreating fire without intermission till they are within *point blanc* shot of their own line, when they will retire through the intervals and take the post assigned them. See plate VII. fig. 4.

If the light troops should happen to be in front of the artillery of their own line, which their officers should ever take care to guard against, the artillery of the line may be embarrassed, and timely care should be taken to incline from that direction.

The general duties of *rifle corps* apply to every description of light infantry, and the attentive and judicious military student will be able to combine the instructions for both where they are analogous. Their movements are perspicuously explained in the several plates attached to this work. The general duties of riflemen are also comprehended under the other remaining heads....but all the duties of light infantry will much depend upon locality, the nature of the country, the force and composition of the enemy's troops, and the activity and intelligence of your own officers.

An enemy must be approached as long as possible unperceived....but tirailleurs must not be so far distant as not to be able to unite promptly, if required. A knowledge of the country and of the customs and dispositions of the people, will much serve the purposes of advanced light corps.

§ 7. OF RETREATING.

When it is determined to retreat, the signal for *firing* being given, it is followed by the signal for *retreating*. The rank which happens to be then in front, immediately fires, goes to the left about, and marches to the rear through the intervals, *twelve* or *twenty* paces, as may be directed, fronts and loads.

When the leaders of the next rank see the rank that has retired formed, and loading in their rear, they give the whistle signal for their rank to fire; and on firing come to the right, pursue their retreat through the intervals, the given distance, come to the left about, load and dress; and so on alternately.

Both in advancing and retreating, arms are *trailed*, and when the signal for *halting* is given, each rank preserves the ground which it is upon, facing towards the enemy. See plate VII. figs. 4 and 5.

§ 8. DUTIES IN ENGAGEMENTS.

In the heat of battle, light corps often decide the conflict. They annoy the enemy by a galling fire on his flanks. They form in various small but compact bodies on numerous points, and sustain cavalry or horse artillery. They gain the rear

of an enemy in force, and attack his rear, his baggage, or his ammunition. They attack a general officer and carry him or his suit off prisoners. They intercept the aids-de-camp, and then send the orders they intercept to their own head quarters, or to the quarters or post of the most contiguous chief officer of division of their own army. They carry off as prisoners commissaries or other intelligent persons, who appear competent to give intelligence of the enemy's affairs. They seize all papers and send them unopened to head quarters.

§ 9. CROSSING RIVERS.

Light troops being always in advance, and being the most hardy, they are usually dextrous in passing rivers. If it should be necessary for an army to pass, and the construction of bridges occupy much time, light infantry are sent across in advance, to reconnoitre, to report on all that is interesting, to establish themselves if requisite in good positions, to occupy posts near the rivers, woods, hedges, houses, villages, and to prevent any communication with an enemy, so that in the passage of the river the main army may be unmolested.

The occupation of the positions also comprehends the guarding against and the prevention of ambuscades. If it is rendered necessary by the want of positions naturally strong, light troops should also construct small redoubts; and if the enemy should attempt to dislodge the light troops, they should form ambuscades, and resort to suitable modes and stratagems to impede the march of the enemy.

To illustrate to the *eye*, a few examples are given of the positions, and mode of going into action with light troops, of the mode of march, when they act as outposts, and advanced or rear guard, advancing or retreating.

The plate X. fig. 1, represents the mode in which light troops commence an attack in a regular engagement; the first line of the enemy is seen at B B, its left flank covered by a village, its left wing with its front on elevated ground, and the right wing covered by a river, running obliquely to its rear.

A A, represents the positions of the attacking army, in two lines; extending parallel to the enemy but obliquely across a high road.

C, exhibits enclosed grounds and fields, at the foot of the elevated ground on which the enemy is posted, of which the light

troops are taking possession, and from thence annoying the enemy's front.

D D, light troops possessing a hollow way at the foot of the hill on which the left wing of the enemy is posted.

E E, light artillery, and light infantry, part of whom lie on the ground for cover, their position being enclosed.

F F, light cavalry on the flanks of light infantry, attacking the enemy's cavalry.

G, detachments of dragoons, or other horse, advancing to support the tirailleurs and light artillery.

H, light troops, extending to cover the flanks, and keeping intervals to admit troops from the front, if they should need to retreat; and to support them, if required to push on in advance.

Plate X, Fig. 2, represents the manner in which light troops may cover the flanks of battalions of infantry in line. The direction of the colors shows the front of the corps.

A, shows the right wing of an army composed wholly of infantry.

B B, the positions of cavalry of the right wing, at different times.

C C, light infantry, formed in column, in order to follow and cover their movements, between the two lines; and to advance upon either or both flanks, or by their intervals, as may be required.

D D, reserved line of infantry, stationed to support the two first, thrown into line and column, prepared for either movement.

E, squadrons of cavalry, escorting light artillery from the rear to the flank.

F, a heavy line of enemy's cavalry bearing down upon the line, but kept in check by the advance of the cavalry G G, which comes up in oblique order to support the disconcerted squadrons at L.

E E, flying artillery, advancing from the rear to support the cavalry disconcerted at L, and the oblique wheel upon their left of the cavalry G G.

H, position of light troops advancing from the rear of the column of infantry, in an oblique direction, to act in concert with the light artillery at E, and the charge of the cavalry at G G, and attack the enemy F F, at the same moment on both flanks and front.

I I, part of the second line wheeling into the position of the troops at C, which have furnished the column H H.

K, a division faced about to support the light artillery, E, in their attack.

Plate X. fig. 3, represents the disposition of light troops in a weak position. To provide against emergencies, into which necessity may force an army, is a proper consideration in the study of tactics. In retreats the choice of ground is rarely at the discretion of the retreating army; and how to make choice of the best means to defend the weakest place, is not only most important in itself, but it also unfolds the means of defence generally.

The ground into which the army on the defensive is forced, is supposed to be flanked by hills or mountains; such are many of the positions recorded in the retreat of the ten thousand Greeks, of Championnet in Italy, and of Moreau from Swabia to the Rhine.

Having performed a severe day's march in retreat, the troops from fatigue occupy a defile. The light corps of rifle and light infantry cover the rear; and as soon as the lines are posted, and such works as may be necessary for artillery thrown up, the light corps have formed as the ground will admit on the flanks.

The weak points of the position are shown by the letters A A.

B, shows the first line, formed three deep, with the artillery of the three lines in the intervals of corps.

C, The second line, formed three deep, forming column of battalion, their heads opposite the intervals of the front line; ready to advance in column or in *echellon*; should the first line be shaken or need support.

D, The third line, formed three deep, to support the second line.

E, Ground marked for the position of the first line, should it be found necessary to retreat, while the second line advances; either from the usefulness of a succession of troops, or through severe service.

F, Cavalry in reserve.

G G, Flying artillery in reserve to cover the advance of the second line; and the third line.

The foregoing sketches of the service of light corps are given, to induce a more intimate enquiry into the principles of discipline.

§ 10. ILLUSTRATIONS OF MOVEMENTS.

Plate X. Fig. 1. represents a march advancing in an open country. A. a small detachment of mounted light troops, opening the route. B. a strong advanced guard, with an escort of stores. C. the park of artillery. D. the main body in column. E. the engineers and artillery equipage, with the artillery of the line. F. the cavalry in column. G. the baggage of the army and camp equipage. H. the rear guard. I. I. I. I. shew the position of the flankers; which, in a close country, must be riflemen; but in an open country, should be mounted light dragoons, mixed with mounted riflemen, or in alternate troops.

Fig. 2. a movement of the same nature, in an intersected country, after passing a defile, and entering a valley with a river on their left flank, and thick woods on their right.

The dispositions of the front must be here strong, because formation in order of battle is not so easy as in an open country; the artillery battery must, therefore, be powerful with the advanced guard, which must be strong itself; and the riflemen in numerous strong advanced parties, particularly in the advanced flanks.

A. is the corps of light troops in advance, as *eclaireurs*. B. the advanced guard, with its strong battery of field artillery, and some light artillery; the magazine and park equipage. C. the main body of infantry in column of march. D. the cavalry. E. the park and baggage, just passed through the defile. F. the rear guard, about to pass the defile. G. G. G. G. the riflemen, as out posts and flankers.

Plate XI. Fig. 1. represents an ambuscade laid in an intersected woody country, for an enemy on its march. A. A. describe the route which the enemy is pursuing. B. the position of the principal corps destined to take the enemy in ambuscade. C. C. two other detachments, intended to take advantage of the ambuscade upon the enemy and attack his rear, or if he should push forward, to intercept his retreat by the road on his left. D. a corps posted to intercept the enemy, if it should attempt to retreat by the road on its right. E. the advanced guard of the enemy. The enemy's rear guard is in front of A. and C. the main body moving in column towards E. Light corps are concealed, during such

ambuscades, and they must make such precautionary arrangements, as not to reach each other in any cross fire.

Plate XI. Fig. 2, represents the interception of a convoy of boats passing down a river. B. B. represents the fleet of boats passing down. A. a party stationed in concealment, with batteries of artillery, masked on the shores, by bushes cut and placed so as to be suddenly removed and leave the battery open. C. the guns placed so as to produce a cross fire, and the line of fire described. D. small islands in the river lower down, behind which such of the boats as have escaped, seek to hide. E. and F. troops....some of which have previously passed, in anticipation of such an event, and who seize the fugitives.

Plate XII. Fig. 1. shews the dispositions for crossing a river in the face of an enemy. The enemy is supposed to be entrenched on the high grounds at D. The army intending to pass the river at A. B. C. detaches its cavalry and light troops to occupy the strongest ground on the opposite side; while the artillery of the right and left wings, B. and C. cover the passage of the river, by the centre, A. in two columns; their movement is oblique to the current. E. the riflemen occupying the hedges and skirts of the woods, after crossing. F. the cavalry of the advance forming on a piece of open ground. G. the route of the right column of the centre, as it passes the river; the left column pursues the route of E. E.

Plate XII. Fig. 2. represents the dispositions made for passing a river in retreat. An island is preferred, where access is, in the first instance, easy; as affording also some defence as a ditch, to repel assault. The position chosen on the opposite branch of the river, will be governed more by the nature of the bank upon which the landing is to be made, which is the principal object, and must be so calculated as to the offset of the current, when many vessels are launched and passing. A. the place chosen for the embarkation. C. the position taken by the first division of light troops, cavalry and artillery, which have passed, with artillery posted so as to cover the landing lower down. D. D. the cavalry and baggage posted and masked while the main body is passing the river. E. E. the rear guard and picket of cavalry and of riflemen, posted to cover the retreat. F. the ground upon which the army is to encamp after pasing the river. G. the high ground occupied by the enemy. H. H. redoubts with troops to serve them to cover the passage of both streams and the retreat.

CHAP. VII.

§ 1. DUTIES OF LIGHT CORPS ON SERVICE.

AS the United States cannot be attacked but from the sea, or from Canada, Florida, or Louisiana, attention should be particularly paid to the duties of those who would have to guard the sea coast, and to repel, annoy, impede, or watch an invading enemy. In every instance regarding the service as defensive, we must always keep in mind the solid maxim of the general *La Fayette*, "that there is no effective system of defence which does not act on the offensive;" light corps being always preferred in advanced service, their duties apply to every corps employed in the like service.

An officer commanding a strong detachment on the coast must consider two things as equally important: first, that he should be able to maintain his post, by preventing a landing; or, secondly, that should he be obliged to fall back, he should not be overpowered by the superior force of the enemy.

The first thing he ought to do, is to choose some strong position or commanding ground, where he can place a steady officer to look out, with a good telescope, and obtain timely information of the number, size, and strength of the vessels, in the road or bay, or if any cruizer is thereabouts who could give him proper intelligence or act in defence in common with him. He must keep a good intelligence with the best disposed inhabitants, particularly with the seafaring people, in his neighborhood, from whom he may learn the nation and number of ships, &c. He ought to be capable of distinguishing a transport or merchantman from a man of war, frigate, bomb vessel, or gun boat; not only for the sake of his own safety, but that he may be able to deliver a true and correct report of the enemy's strength, to the general or superior officer nearest to him, or under whose orders he may be placed.

As soon as an enemy is in sight, the commanding officer must immediately be informed of their strength; the number and size of the vessels. He ought to reckon by the tide, at

what hour, by day and night, a landing can be effected, and judge, by the form of the coast, and depth of the water, in what place the troops can be disembarked. Having made these observations, he must send a circumstantial report of the whole to his commanding general, and an advice to the posts nearest to him; after this he will transmit a further account of the most probable schemes or progress of the enemy.

If an enemy's fleet be discovered, or any signal given of its approach, late in the evening, an officer commanding on the coast must never light a fire during the night, except it be specially ordered by his instructions, for fear of affording the enemy a facility in sounding, or the means of landing some small parties, who might fall unexpectedly upon his outposts, and cut off the communication between them; a complete landing being very unusual and difficult during the night. However, a third part of the troops may remain on duty, and continual patroles be sent out from one place to another; besides this the remainder of the men should be quartered in such a manner that they may be collected together in a short time. If on the break of day, the enemy should attempt to land any troops, the commanding officer, who is supposed to be in force, must have his army on a point from whence he can best obstruct or prevent it.

With respect to artillery, if he has pieces of a large calibre, and a sufficient number of horses cannot be procured to remove them, they should be buried, or concealed in a river or marsh. Small ordnance, such as 6 and 12 pounders, although they do not carry so far as those of a heavier metal, are undoubtedly more useful, on account of the facility with which they may be transported to any place, according to the movements of the enemy.

The best places for the erecting of batteries, are, in general, capes or projecting lands; they must, if possible, be chosen near to each other, so that from any two of them a cross fire may be kept upon such of the enemy's sloops or small vessels as are filled with troops. Points which are too elevated, though they may command a better view of the sea, are not so well adapted for erecting batteries for defence, as low places, from whence the surface of the water can be completely swept.

As the saliant angles will of course be provided with ordnance, the other points which appear to be accessible must be barricadoed with large trees, cut for that purpose *en abatis*, or defended by breastworks; here riflemen and light infantry may be posted, in small parties of half a dozen, under a corporal or serjeant, supported by the pikemen and militia of the place, in a second line, commanded by their officers jointly with those of the riflemen, in order to repulse any cavalry the enemy may attempt to put on shore.

The remainder of the infantry may be drawn up in two ranks, at some small distance from the shore, with field pieces on a central point, from whence every landing place can be reached immediately. The cavalry may be divided into two or three bodies of troops, according to its number, and placed, if possible, behind some height or rising ground, not only to be sheltered from the enemy's fire, but also to surprise him the better by a sudden and unexpected attack.

In case the enemy should land any forces, notwithstanding the grape shot of the cannon, and the fire of the riflemen, the commanding officer must suddenly oppose them; and being with his infantry at fifty or sixty paces distant, he will order the riflemen to fall back on the flanks, and commence a brisk discharge of artillery and small arms.

Should the enemy continue to advance, a signal previously agreed on, should be given to the officer commanding the cavalry; and he must, without losing a moment, fall into two different corps upon the enemy's wings; the infantry with fixed bayonets, and the pikemen, will support this attack. The third corps of cavalry will always be kept in reserve to favor a retreat, if the enemy should prove too strong, or be reinforced with other troops, effecting a second landing in some place where less resistance has been made; or if he should become able to maintain himself on shore with a double or triple number of men, and endeavor to cut off the main body of our troops.

Under these circumstances, and after having tried every method of defence, if the commanding officer finds the enemy's superiority, he will send some orderly cavalry in full gallop to each of his batteries and posts, to draw off the pieces of ordnance, if horses can be procured; and he will keep a

steady and constant fire, till all his posts and artillery can join in such place as has been previously and confidentially agreed upon, by the respective commanding officers of each corps, battery, or outpost. In the mean time, he will send advice of his retreat, mentioning at what place he means to rally his troops, to both the commanding officers on the coast, on his right and on his left, in order that they may not be surprised nor cut off; and also to the next general, under whose orders he may be, or who is appointed to support him. Some of his light horse must be dispatched to the magazines of forage or ammunition, which it may be necessary according to his instructions to remove or burn. His corps of reserve cavalry, with a good number of light infantry or riflemen, will be ordered to cover his retreat in the manner explained in the next section. All cattle and provisions will be ordered farther into the country, and small detachments sent where it may be necessary to cover and protect their dispositions.

§ 2. CONDUCT IN A RETREAT.

Another event which may possibly happen, is, that an officer on the coast commanding only a look-out post, and not having sufficient means of defence, either in men or artillery, will be obliged, according to his instructions, to quit the place, on account of the enemy landing with a superior force.

An officer thus situated ought to take every possible precaution before hand to secure his retreat (keeping, however, the strictest secrecy with regard to his intentions and instructions:) and after having properly observed the strength of the enemy, and seen their landing put in execution; he must send a correct and circumstantial report to the general under whose orders he may be placed, and an advice to the posts on the shore to his right and left, in order to prevent their being surprised; he will also inform the principal magistrates and inhabitants, in time, of the place of his retreat; to prevent being cut off, he will send his infantry before, and retain the militia or volunteers of the place with him. But if old or married men or heads of families should decline to march, he will disarm them to save them from the violence of the enemy, who may carry off the arms. He must order magazines to be burnt, which cannot be transported towards the

interior, and see his orders executed before his departure; while this is doing he will keep a watchful eye over the motions of the enemy; and having obtained a perfect knowlege of his strength, will finally follow his infantry.

The public cash, and all belonging to the public in his neighborhood, must be taken particular care of; as must also, if possible, the money belonging to the inhabitants or individual merchants, which may have been entrusted to the military. Such property may easily be sent in good time into the interior; and if the commanding officer has not orders to enforce these salutary measures, he must use every argument to persuade the proprietors to adopt them, but under no circumstances must they fall into the hands of the enemy.

Having done this, the commanding officer will close his retreat with some picked young men of his infantry, who are to break up the roads, and destroy the wooden bridges between the enemy and his corps, to prevent his being pursued. If there should be any place where the progress of the enemy can be opposed with a probability of success, his cavalry may halt and remain there some hours, particularly if some small detachments have been cut off, and are expected to join the main body. The infantry, which began to retreat, having carefully taken the firelocks from those inhabitants who were unwilling to leave their dwellings, every soldier, who is able, will carry two of these firelocks, if no carts or waggons can be had.

A commanding officer who is obliged to retreat from a place, or to fight the enemy at the outside of it, will do well to leave behind, as long as possible, a small detachment of infantry, and half a dozen cavalry, under a steady serjeant or corporal, to prevent any disorders which ill-disposed men might commit during the affair. The commanding officer should never confide too implicitly in the inhabitants of a place where he is quartered, unless he has a perfect knowlege of their dispositions towards their country and dislike of the enemy; if suspicious, their conduct must be jealously watched: the least intelligence with the enemy, disaffected sentiments, cowardice, or fear of an invasion, may, in the moment when an attack is expected, discover dispositions which had hitherto been concealed; and precaution is always

the surest road to security. Above all things, the care of setting fire to the ammunition, stores, or forage, which cannot be carried off, must never be left to the inhabitants, but be performed by the troops just before the retreat.

§ 3. HOW THEY ACT IN CONCERT WITH HORSE.

To make a retreat in good order and with security, requires the greatest skill of all military movements. To effect this, it is necessary that a prudent and well informed commanding officer should remain in the rear, the care of leading the column being entrusted to some officer whose abilities can be equally relied on.

It is a general rule (except when acting in a plain), that cavalry ought to retreat first; after it the infantry; only a small number of cavalry remaining behind, chiefly to convey orders to the head of the column when it may be requisite to close its files, or increase its pace.

The rear guard must endeavor, as often as possible, to block up the way, especially in the most narrow passages, where the pursuit made by the enemy may be much obstructed. This can be done by felling large trees in the defiles, or placing waggons from which the wheels have been taken away, and will considerably delay the enemy's approach.

If the retreat lies over a wooden bridge, the commanding officer may order some men at the head of the column to take out the nails and disjoint the planks, after which the rear guard will take them off and burn or otherwise destroy the bridge. Should there be many trees or thickets on the borders of the river, some riflemen or light infantry may be left behind, with a small body of cavalry in a second line to support them....these will check the enemy, by a constant and well directed fire, till the whole of the column get out of reach. But if the borders of the river are steep, and the country flat and open, cavalry may be placed at some distance from the river just opposite those parts which are fordable, where they will be ready to charge the enemy immediately upon his crossing, and thereby afford the infantry time to make good their retreat; after which the cavalry may retreat, and join them.

If the retreat should be across an extensive plain or heath, where many roads meet, the infantry may begin the retreat by

double files, with all the artillery in the front which may not be necessary to protect this movement, and which must be placed before the cavalry, who must march also by double files from the centre. In case the enemy should attack, the commander of the artillery must order it to halt, and turn his guns towards the enemy; the two first files of the cavalry wheel about and face the enemy; and the right files wheel suddenly to the left, and the left files to the right; the centre slowly and the wings in full gallop, forming a line which fronts the enemy.

The infantry must be ordered to halt also, and to form, if necessary, a second line behind the cavalry, by the same movement in a contrary way; to perform which, the two last double files halt and front, and the others wheeling backward to the right and left, form the line with a front formed to the rear; after which they may be ordered in close column, to be directed, as occasion may require, in support of the cavalry.

Should there be any defile at the end of the plain, through which the cavalry are compelled to pass in the presence of the enemy, they must perform it with all possible speed, and form a line at a small distance beyond it; the artillery will then follow; while the infantry keeping up a constant fire, will retire from the right and left wings by files, each file, after having fired, falling in the rear, in the same manner as is practised in passing bridges. The riflemen or light infantry are to form a rear guard, but should not follow the main road; they ought rather to cross the woods or thickets at both sides, by which means they can, without exposing themselves, keep up a cross fire upon the enemy, if he should pursue the infantry.

If the roads are very good and broad, a skilful officer of cavalry may be ordered to the rear guard with a party of cavalry, which he will form in three or five troops, according to the ground; if he forms them in three, the centre troop will remain in the second line; if in five, the right, centre and left troops will form the first line. They must advance 100 or 200 paces towards the enemy, and open their files, and extend in the manner practised by riflemen, in order to skirmish with the enemy till the retreat is made to join the reserve, which must be extended time enough in the same way. This may be continued till the infantry has retreated far enough, when the cavalry may join it in full trot. This

movement may likewise be performed with two lines containing an equal number of troops, as two or four in each line. If some thickets or woods favor the light infantry or riflemen, they may be placed upon the wings of the cavalry, to protect or follow its motions of retreat in the same manner.

Horse artillery and howitzers are chiefly of use when supporting the cavalry by a cross fire. If the country should be flat and open, and the cavalry are not provided with them, some cavalry flankers may be sent out from both wings to skirmish with the enemy.

A *flanker* on horseback ought always to observe, that when he has fired his rifle or one of his pistols at the enemy, and means to retreat, he should turn to the left; if it should be necessary to face again, on being pursued by one of the enemy's flankers, he must turn to the right, in order to have his right arm at liberty to defend himself. If he should be separated or cut off from his corps he must not give himself up, but, on the contrary, try to make his way through bushes and thickets, that he may rejoin his corps.

The flankers of the infantry may act in conjunction with cavalry in the retreat, as well as in any other manœuvre. If the retreat should lie across the plains or fields, the cavalry must seize any favorable opportunity to fall vigorously upon the pursuers, and thereby give the infantry time to retreat in order; after having routed the enemy, they will follow the column and bring up the rear.

§ 4. CAVALRY RIFLEMEN.

This description of light troops is, in every respect, excepting being mounted, the same as riflemen on foot. They are peculiar to the United States. French *Voltiguers* bear a close resemblance to them.

§ 5. DUTIES OF ADVANCED GUARDS AND OUT POSTS OF INFANTRY IN THE FIELD.

Supposing the enemy to have effected the disembarkation of a numerous body of troops, which by superiority of numbers, or by surprise, may have been able to drive back the posts and detachments stationed along the coast, and that such detachments had again joined the main body to which they belonged; in this case these united divisions must

endeavor to advance against the enemy, in order to prevent his further progress towards the interior of the country. It next becomes necessary to consider what conduct should be pursued by the advanced guards and out posts in reconnoitring the roads, passes and defiles between them and the enemy, and preserving the communication between their own detachments. Another important consideration is, in what manner their centries must be placed, in order to prevent any person going to or coming from the enemy without leave. The nature of the ground or extent of the country must determine whether these posts are to consist of cavalry or infantry; but the same general rules will serve for either horse or foot.

For example, where there are woods or thickets, along the front towards the enemy, the infantry must line the outsides of the woods, and the cavalry be encamped behind them in the plain.

If, on the contrary, there should be a plain between the out posts and the enemy; if such plain is crossed by a river, by rivulets, canals, or marshy ground, the cavalry may be placed behind them, and the infantry be posted behind the broken bridges, or at openings through which the enemy would most probably endeavor to advance.

If there are villages inclosed between the out posts of the army, they cannot be guarded by cavalry; therefore some infantry with cannon ought to form the principal force, especially if these villages have orchards, gardens, or alleys of trees, which cross them, and are surrounded by hedges or walls. If a chain of out posts is to be formed along the woods, every spot which is much elevated, and every salient angle, ought to be occupied by a centry or two at least. The vallies and hollow ways through which the enemy's spies might approach, must also be attended to; and if the strength of the out posts does not allow of a sufficient number of fixed sentries, some of them may be ordered to keep moving from one post to another For instance, between two fixed centries, one moving continually from the right to the left, and from left to right, may serve instead of two: this precaution is peculiarly necessary where the inequality of the ground, or any other obstacle, may prevent the centries from easily seeing

each other. The centries, however, which are nearest to the enemy, or upon any roads, ought to be doubled.

About 200 paces, or less, distant from each other, some small posts will be placed, according to the ground; each commanded by a serjeant or corporal, and, if possible, in sight of one another, with a number sufficient to relieve four or six centries every two hours.

These out posts may be changed every twelve hours if necessary; but this must be done about the evening, or at day break in the morning, the latter being the most probable time for an attack, and the night being improper for it. The main guards, on which three, or four, or six small posts are dependent, will always have an officer or two to defend them.

These main guards will be placed, in preference, upon he most important posts, roads, or openings of the country. If they cannot see one another, they will sometimes in the day, and often during the night, send patroles from one to the other. The eldest captain will therefore be placed in the centre of them, to receive the advices or reports of the others. The officer commanding at each of these posts, must know the quarters of the general or field officer of the day, or of the commanding officer named for the out posts, if there is one, that he may send information to him, by some orderly men of the cavalry, of any matter of importance which may happen during the day or night.

Every one of these guards will be covered by an abatis or parapet, where in some instances cannon may be placed, especially if the main road leads to it.

§ 6. OF VIDETTES, ECLAIREURS, PATROLES, CENTINELS OR CENTRIES, OUT-SCOUTS.

All these denominations may be applied to military persons of the same description, to infantry or cavalry, light infantry, or riflemen; they only describe the particular service; but the particular term vidette, though it may mean equally a *centinel* and an *eclaireur*, is generally applied only to a centinel on horseback; which is also very generally understood by *eclaireur*, though the distinction between one and the other, consists in that the videttes are fixed centinels, the eclaireurs may be either fixed or occasional out scouts: so a patrole

may consist of a body of moving eclaireurs, or one or two or more scouts.

The term *eclaireur* has been given to those who have been selected by officers for their intelligence and steadiness (*pour éclairer*) to *keep an eye on*, to *watch*, to *observe*, to *reconnoitre*, to *guide*. Vidette had originally the same signification.

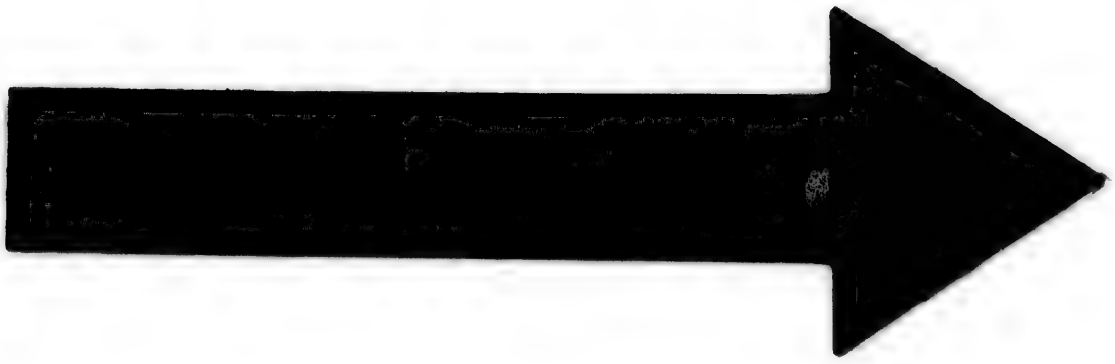
The duties of centinels are understood under the general scheme of service and guards. These few descriptions of troops, which are usually selected men, ascend heights, examine passes and defiles, pass through villages, if required, to obtain intelligence, search thickets, hollow ways, bye roads, woods....in a word, see, hear, and examine, every thing necessary to be known for the purposes of military service by an officer acting offensively or defensively.

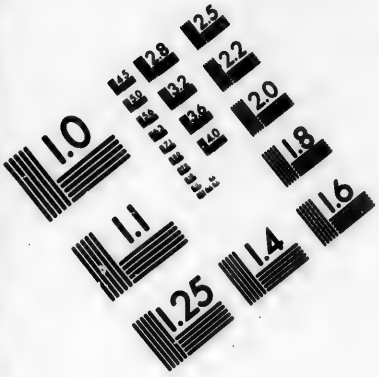
Videttes and eclaireurs are always detached two or more together, with orders not to separate out of sight, nor more than one or two hundred paces, so that they may not both be surprized, that they may know the routes, and, if occasion requires, as guides.

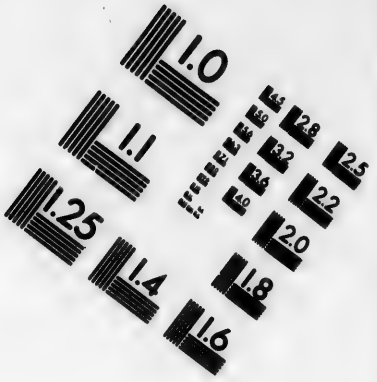
When they enter villages, it must be in separate files. If they meet an enemy by night, and are compelled to fire, they must act so as to disconcert the enemy by a scattered and reiterated fire, constantly changing their own positions, and acting still in concert with their comrades; and, if obliged to retreat, must even, rather than be taken, make a large circuit to avoid the enemy, and rejoin the next day. Videttes, above all things, must avoid offending, much less plundering, the people in whose neighborhood they are on duty. A conciliatory conduct is one of their first duties; they must be mild, but firm....kind to strangers, but faithful to their command. Videttes are stationed on the rear as well as in advance, and it is their duty to report every discovery they make to their commander.

§ 7. ATTACK OF A FORAGE PARTY OF THE ENEMY.

As the security of an army or a camp, will in a great measure depend on the vigilance and intelligence of advanced guards and patroles; they must be always impressed with a sense of the importance of the trust reposed in their honor and courage. An imaginary security has been often too fatal.







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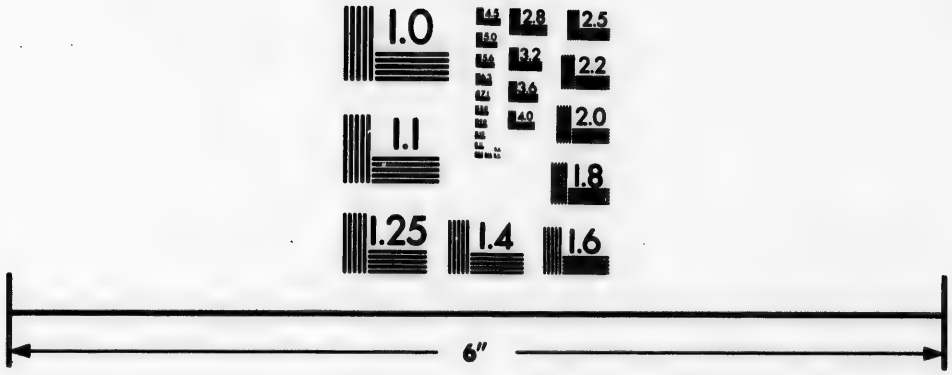

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....The example of *Paulding*, *Williams*, and *Vanwert*, the immortal American militia men, can never be too frequently related and impressed upon the minds of Americans. Nor can the seizure of general Lee by the stratagem of the enemy be too often noticed as a precaution. The gallant exterprise of colonel Barton, of the Rhode Island militia, in seizing the British general Prescot, should be kept before the minds of those who embark in gallant enterprises; and an officer in his military reading, which ought to be the leisure occupation of every officer, will find numerous matters of precaution as well as of counsel in gallant undertakings.

The prince of Hesse Philipsthal, who commanded a corps of Prussians in the Silesian war, had relied too much on his supposed security; but general *Wurmser*, well known in the war of the French revolution, was too vigilant for the Prussian, he surprised and carried him off.

It should be ever kept in mind by an officer who is entrusted with an advanced guard or a patrol, that the very best soldiers are often negligent in bad weather; and that the enemy's officers also know it. Good discipline, however, will overcome this; and a good tempered and well disposed officer, who does not mistake indolence and arrogance for duty, will always find in the good disposition and pride of the soldier, the sure means of enforcing discipline and duty, in such situations, without resorting to severity, unless in an extreme case. In European armies negligence in a vidette is punished with death; because, on the negligence of a vidette may depend the fate of an army, a campaign, or a nation. Cases arise in which, therefore, the heaviest punishment cannot but be inflicted as a measure of example, and to guard against surprizes.

During a high wind, a snow storm, or a fog, enterprizes are often undertaken by active officers. To counteract them a like activity is required on the part of the officer of every corps. When the wind blows towards a post, the officer on that post should take it as a warning to become vigilant whether it rains or snows, and if it is during the night, double care must be taken and double preparation made. The destruction of the American troops at *Paoli* and the *Billet*, and the massacres at Egg Harbor, during the revolution, could

not have been accomplished, had there been a good look out by videttes ; or had due precaution been taken to watch traitors and disaffected persons. Alarms being given frequently by an enemy without any actual attack following, should not be considered as an indication of attack being relinquished ; the alarms may have been purposely numerous, in order to lull into a false security, and to attack at a time little expected. Corps of American cavalry have frequently entered the lines of the enemy, during the revolution, after repeated false attacks, and carried off horses and baggage. This has been effected in noon day on some occasions.

It is not to be supposed that at home, where magazines may be removed towards the interior of the country, and secured in time against any invasion, that the army may be obliged to forage in order to get provision for their horses. Such an undertaking will rather be necessary to an army endeavoring to invade the country, and who, not having been able to transport by sea every requisite, will be driven to it by necessity, not regarding the ruin of inhabitants or the land. It is therefore useful to know how to prevent the enemy from succeeding in so essential an object.

A general or field officer being ordered to attack the enemy's chain of foragers, will, in the first place, examine his dispositions, and chiefly endeavor to discover where most of the enemy's reserve troops are placed.

Having reconnoitred the weakest part of the enemy's chain, he will station his own reserve, under cover of some elevated ground, where the enemy may not expect it, and from whence the officer commanding it may be able to overlook the success of the vanguard, to judge of it, and to make a steady and effectual attack upon the enemy where the line is most exposed, or where it may be most easily broken and routed.

Should the vanguard succeed in any point of the attack whatever (which is very probable if conducted by a skilful and resolute officer, who possesses the confidence of his troops) this vanguard will then be immediately followed by a body of riflemen and select infantry, supported by a sufficient number of skirmishers belonging to the light cavalry, in order to mingle with the foragers and throw them into such confusion as may prevent their rallying again for the remainder of the day.

The first body of the reserve, however, must follow up this brisk attack in good order, and should be commanded by a prudent officer, who will keep a watchful eye upon the enemy, and be ready to attack his reserve, which will doubtless support its own troops if possible. The riflemen and light cavalry must give the enemy no time to pause, but harrass them by constant attacks directed through their centre, in order to keep them in continual confusion.

The second line of reserve may be drawn up in a single rank, and thereby appear to the enemy a greater force than it really is; and be prepared either to complete the rout, or to rally its own riflemen and the skirmishers of cavalry, which may have been formed either from a part of the whole or the whole of the second line.

If the first attack made by the riflemen, flankers, or skirmishers, should fail, they must be rallied by the second body of reserve, and an entire fresh rank of cavalry sent to renew the attack with greater fury. Experience having often proved that although a first attack may have been repulsed, a second will annoy the enemy much more, and sometimes become much more effectual than the former.

The chief object, however, must be to prevent the forage from being completed, and to rout the enemy's foragers in such a manner that they cannot reassemble. If the cavalry should fall in with them before they have separated to begin their work, there will be no harm in beginning the attack immediately; but cavalry going out to attack a foraging party ought to avoid passing through villages or woods, where the enemy may have laid an ambuscade.

§ 8. DUTY OF AN OFFICER OF LIGHT TROOPS, DETACHED IN FRONT OF THE LINE BEFORE AN ENGAGEMENT.

An officer of light troops ordered in front of the line of the army (at the very moment when the enemy meditates an attack) whether to cover an important manœuvre or a deployment, will first receive clear orders from the general commanding. His own discretion must determine how far he ought to advance in front of the line, according to what kind of troops the enemy may offer to his view. His conduct must also be regulated by the nature of the ground; if

cavalry with flankers are opposed to him, he will be cautious that his retreat be not cut off. He will form his chain of riflemen in the best manner, and will station several small parties in reserve behind him, in order to support his advanced platoon, or to relieve them when their ammunition is nearly exhausted.

When the commander of the line begins to open a fire of artillery, or has completed his manœuvre, he will give a signal for the officer commanding the riflemen to fall back (which must be done quietly, and with steadiness and good order) by the sound of the bugle, as is usual with light troops.

If the officer of riflemen should be ordered to cover the movement of a body of horse, he ought, during its attack, to profit of every cover which thickets or bushes may afford him, to gain the flank of the enemy's cavalry, and if it be routed, to pursue it in the same manner.

Should circumstances render it impossible for him to avoid being attacked by a body of cavalry, he will form his men in two ranks at close order, and form a crotchet or potence on each wing, in which position he will wait for the enemy, the front rank presenting bayonets: should the enemy advance to the charge, the rear rank only will fire at the instant he is at twenty-five paces distance; the front rank will then fire in the face of the enemy's cavalry, and after that present their bayonets to his horses. It will, however, be much better to form in three ranks when thus opposed by cavalry, and to keep the fire of the third rank in reserve. These remarks are only intended to remind an officer commanding riflemen of the cautions which are requisite when acting against cavalry; and to evince the necessity of keeping his men within such a distance of each other, that he may be able to reassemble them in time, and the propriety of having a reserve behind him, to form a third rank, in case it should be wanted. A rank of pikes to oppose cavalry in such a position, would be powerfully effective.

Should an officer, commanding some troops of light cavalry, be ordered to cover an attack made in a plain by a body of cavalry; in this case, when the first line appears to have succeeded in the attack, the first flank troop of cavalry may follow, and the officer covering the flank of the second line

may do the same, provided the enemy has no second line; in which case, he ought to be exceedingly cautious, and keep at least half of his men in reserve, that he may not be out-flanked himself. If the enemy succeeds in out-flanking the first line, the officer who covers the second will make every exertion to fall upon his wings, and to throw him into disorder, by a bold and rapid manœuvre.

The best way of covering a body of cavalry which stands in line, is to have one of its wings protected by a wood, which is entrenched, or lined with light infantry and cannon. The horse artillery may likewise be of infinite use to secure the other wing; especially if it can be placed behind some elevated ground, and so disposed as to fire in an oblique direction on the enemy's flank.

§ 9. OF ESCORTING A CONVOY.

The escort of a convoy is commonly divided into three parts; one at the head, one at the centre, and one at the rear; besides which, two armed soldiers may be placed at the side of each waggon, to watch the conduct of the drivers, prevent purloining of stores, &c.

Such escorts are seldom composed of cavalry, except when the country through which the convoy is to proceed, is level and open; in which case, some cavalry will of course be ordered to precede the convoy, cover the flanks, or form a rear guard, and to attack an enemy on every side who may attempt to stop the march of the convoy.

To pursue an enemy very far, in such service, would be imprudent, lest it should be a stratagem of the enemy to draw off the escort, and in the mean time attack the convoy, whose march should be continued, if possible. For this reason, cavalry is useful to ascertain the exact number of the enemy, and whether he is in sufficient force to be dangerous, or only comes to reconnoitre the march.

A convoy having a van and rear guard, with patroles of cavalry upon its flanks, and the commanding officer discovering, either by means of his scouts, or from his own observation, that the enemy is within a couple of miles, and preparing to attack him with both infantry and cavalry, will, if, the roads be narrow, and the country full of woods (begin-

ning only at the head), turn the first waggon round towards the second, so that the head of the fore horse may be brought close to the other waggon: and as the remainder continues to advance, every odd number will be turned with its front from the enemy. If, for example, the escort of the convoy consist of 200 men, and the waggons 50 in number, the whole will occupy from 900 to 1000 paces before the waggons are turned in the manner above described. But after that, the extent from front to rear will be only between 150 and 160 paces, and the last waggon will of course have more than 750 paces to advance to its place.

If the country be rather open, or the road broad, and the convoy more numerous than that stated above (consisting, for instance, of 100 waggons or more), and it is apprehended that an attack will be made before they can have time to close, they must be stopped just at the centre; and a fourth part of the waggons from the front, with another fourth part from the rear, ordered to close up to the centre, so as to form two parallel lines of waggons, with the horses turned half one way and half the other; between these the infantry will be placed to act as riflemen, if there are no other riflemen with the party. The cavalry may be divided into two parts, of two troops each; one troop in the front, one on each side, and one in the rear.

It has been already observed, that at least two armed soldiers are necessary to each waggon, to prevent confusion, &c. to see that the drivers do not on the first alarm cut the traces, and make off with the horses, and also to assist in turning them inwards, and bringing the waggons close to each other. It would likewise be of great service to order a couple of artillery waggons at the head of the convoy, and at the rear, each carrying a dozen of chevaux de frize, constructed with hinges to fold up, and which could be easily opened again. Such chevaux de frize being eight or nine feet long each, would nearly cover the front, rear, and flanks of the convoy; and would serve as a parapet, behind which the infantry of the van and rear guard will be enabled to make a strong resistance, placing their cannon (if they have any) on each side.

There is another method sometimes adopted, which is to form an ordinary square, turning the heads of all the horses

inwards, and the backs of the waggons outwards. This is very proper, if the convoy is to pass a night in a plain; but to do this effectually, it will be necessary to go out of the road, and will take a long time either to form the square, or to put the convoy in motion next morning; and as the enemy will not always give sufficient time to perform this manœuvre, the attempting it may create confusion.

It may be hardly necessary to mention, that before the convoy sets off, every driver ought to be provided with a pail or bucket to water his horses, and with oats in proportion to circumstances.

If the commander of a convoy has occasion to pass through a narrow passage or defile, he will send a troop of horse some time before him, to take post at the farther end of it, and also some patroles to examine the ground on each side for the security of the flanks. Small detachments from the main guard should likewise be advanced about three miles in front, before he enters the defile, which he ought not to do until he is certain that he can pass it with safety. While the patrole is sent out, he can (if there is a plain before the defile) draw up his waggons in two rows; and after his van guard has passed the defile and sent forward to reconnoitre, then his centre will begin to move, followed by a row of waggons. The rear guard, which remains behind, will order the second row to follow the first, very close, and seeing that it is not pursued by an enemy, will close the march.

If a waggon break down, it must be drawn on one side; the most valuable part of its load may be put on horses, or distributed among the other waggons; but every exertion must be made to prevent the march being stopped by the accident; if such a misfortune cannot be avoided, the front should halt a moment rather than break the line.

When night comes on, the commander of the convoy will form a double row or square of his waggons in an open place, not too far from the water, nor too near to a village; and will place his guards or outposts on the roads, avenues, and elevated grounds; the remainder of his men being encamped at each end, and upon the flanks of the convoy. Should any part of this consist of ammunition, every precaution must be taken to prevent accidents by fire.

If there should be a narrow pass or defile in his route, near where he intends to halt, the commanding officer will endeavor to pass it before night, that he may, if possible, have it in his rear. Every one, even every private soldier, who has the care of or conducts a waggon, ought to be instructed in this part of his duty by his commanding officer.

§ 10. OF THE ATTACK OF A CONVOY.

An officer who is ordered to attack a convoy will go himself with a strong patrole or proper escort, and reconnoitre the enemy's motions and number, avoiding being discovered by him if possible.

The more numerous the convoy is, and the more extensive the space it occupies, so much greater will be the probability of the attack proving successful. Some general rules are therefore to be considered.

In the first place, it is necessary to examine on which side the convoy could be supported by the enemy, in order to attack it on the opposite side; unless the officer commanding the attack has sufficient force to place a strong body of troops between the convoy and the enemy, and is certain of being able to keep him off by that means until he has effected his purpose.

If the escort of a convoy be in three divisions, one at the head, another at the centre, and the third in the rear; the ground and nature of the country through which it has to pass, will determine which of these parts should be attacked by choice.

If the attack is directed towards the head, a detachment ought to be sent round to annoy the troops in the centre and rear of the escort, and prevent them from advancing to support those in front; and the slow pace of the convoy will give plenty of time to adopt this measure. When the commanding officer perceives, by firing at the centre, and in the rear of the convoy, that his detachments are engaged with the enemy, he will fall upon the troops at the head with the remainder of his forces, and having succeeded in routing them, will order half his men to pursue them, during which the other half will destroy and burn the waggons, having first cut the traces, and sent the horses away in charge of a small party.

No time must be lost; and if any reinforcement to the enemy should come up, the horses which cannot be brought away must be destroyed, and the waggons broken; those containing ammunition may be blown up.

If from the nature of the road, or other local circumstances, it should be deemed most eligible to attack the convoy in the centre, and cut it in two, in order to carry away the foremost waggons, and destroy the remainder, the greatest confusion may be occasioned in it by means of a superior number of riflemen. The commanding officer ought therefore to multiply his attacks, by dismounting a number of his cavalry, if the country is not too level, and ordering them to act as riflemen. In some instances, a detachment of riflemen may act as *voltigeurs*, that is, they may be mounted behind the horsemen, to annoy the enemy's force in various parts, and spread terror and disorder through the whole line, both of the escort and convoy.

The above method of attacking a convoy on all sides with light infantry and cavalry intermixed, will succeed the best when the enemy is confined in a narrow pass, or the country abounds with woods. In a plain, or an open country, some horse artillery, or a couple of howitzers, will do great execution; and both destroy the waggons and throw the drivers and escort into the most terrible and unavoidable confusion, especially if the attack with cavalry, acting as skirmishers, with a good number of riflemen between them, be vigorously repeated, and accompanied by loud shouts and a dreadful noise; and if it has been possible in some part of the ground, where there are woods or thick bushes, to conceal an ambuscade, which cannot be discovered by the patroles of the enemy.

CHAP. VIII.

§ 1. PROPERTIES OF THE RIFLE.

THE superiority of the rifle consists in carrying the ball with more directness to the object aimed at, than the smooth barrel; this is attributable to the action of the atmosphere upon the ball, after it is exploded from the muzzle of the piece, which operates differently on the line of direction and the manner of the motion of the ball. The smooth barrel throws the ball in such a manner that its motion resembles that of the wheel of a carriage, which constantly turns on an axis of its own, and still proceeds along a prolongued line; while the ball of the rifled barrel, being indented or channeled by the grooves of the barrel, proceeds not like the wheel of the carriage rolling forward; but in a spiral direction, or in a path resembling the motion of a cork-screw forced horizontally forward. The course of the smooth ball is also considerably deflected above the horizontal line of the barrel when aim is taken, so considerably that it becomes necessary to aim lower than the level line when the objects are *near*, and to aim higher than the level line when beyond a given distance; but though there is some elevation of the rifle ball in its course, it is yet relatively so small that it is not required to aim lower than the object at any distance, though when at a considerable distance, say 500 to 700 yards, it is necessary to take a higher aim, in order to countervail the power of gravity upon the weight of the ball. The operation of the air upon a rifle ball, will be clearly understood, by viewing the spiral motion of an *arrow*, which has three feathered wings; the air passing between the feathers causes the arrow to spirl along or move like a screw; the same effect is produced by the impression made in the sides of a bullet by the grooves of the rifle.

§ 2. OF LOADING.

Some hold that a quantity of powder equal to three times the full of the mould in which the ball is cast, is the proper charge; others four times the full of the mould; on this plan a ball of twenty to the pound would be fired with nearly a

fourth of the weight of the ball. But some say that one third of the weight of the ball is not too much; experience shews that to shoot at 250 to 300 yards, one fourth or a fifth is enough.

The backwoodsmen of the western frontier, place the ball in the palm of their left hand, and cupping the hand as much as possible, cover the ball with powder, and make that their charge.

The ball should be just of that size as to rest on the grooves, and require not much trouble to force it down, but yet not to pass without being forced.

The grooves should not be cut too deep.

§ 3. CLEANING THE RIFLE.

The greatest care should be taken in preserving the interior of the barrel clean, and the lock....careful shooters wipe out with flannel or a clean cotton rag, at every 8 or 10 shots, others 20; no iron instruments should be used in cleaning; the spiral brush of hog's bristles should be used to scour with hot water; the woollen brush composed of layers of wool, alternately placed across the openings of a piece of hickory, split four times to a length of about six inches; the ends of the wool make an excellent brush. After washing clean and drying, the inside should be lightly touched with good oil.

§ 4. LOCK.

The lock of the rifle should be of the best kind. It is a great extravagance and waste to provide rifles without locks of the best workmanship, for they should not only be made so well as to go off easy, but to last and endure severe service. The best marksman cannot preserve a just level, if he is obliged to tug with his finger at a trigger restrained by a spring unnecessarily stiff; nor can there be safety in movement if the workmanship be so bad as to leave no certainty whether it will fire or not. The rifle lock should have a check bolt upon the cock to prevent accidents, and this bolt should be set when after firing they come to half cock, the pan shut while loading.

The furniture and barrel of the rifle should neither of them be bright, a glaze made of camphor should be gently brushed over them after a proper cleaning, and this glaze would resist weather and prevent rust or glare.

§ 5. GUN-POWDER.

The chief difficulty with powder is to prevent its becoming damp from the atmosphere; it should therefore be kept in a vessel perfectly close—and the charge should be encreased in damp weather—the powder should be of even grains; and if not mix it well. Glazed powder is not so liable to be affected by damp. Chargers should be very small at the nose, or where the finger presses.

§ 6. THE PATCH,

Is a small piece of green shammey, or buck skin, or kid skin, put round the ball before forcing it into the barrel....care should be taken it be not too thick and defeat its purpose....it is used to take off from the windage, to retain the air, and the grease is used to facilitate the passage of the ball by diminishing the friction.

A method has been usefully resorted to of providing a punch made of steel, which by means of a hollow barrel equal to the calibre, cut either *hat* or *leather* pieces to serve as wads, which are forced down immediately on the powder, after the powder is levelled well by a stroke of the but against the ground. This punch is made in the manner of those punches used by saddlers to cut large holes in stirrup leathers, &c.; hats, leather of all kinds, even linen, cotton or woollen cloth, or paper, might be cut with this punch with great advantage for wads; the ball should be laid over this kind of wad, and followed by another well forced in, when it is intended to march loaded.

§ 7. TO PRESERVE THE RIFLE FROM RUST.

It must be obvious that the rifle barrel should not be bright; that the equipments of riflemen should be free from every thing that is glittering or of a striking color, must be perceived upon every consideration of their duties. Great care, however, must be taken, in the frequent inspection of the rifle, to guard against any neglect of keeping it in order, when it has been *browned*, *greened*, or *blacked*.

The barrel may be secured against external rust, by the following means:....If it be intended to give the barrel a clean black color, take half an ounce of *camphor*, a gill of oil of turpentine, a gill of Florence oil, and a clean earthen cup, simmer them over a fire without flame, until the whole shall be incorporated, and in an uniform liquid state, putting the camphor in last; add to this liquid an ounce of clean white bees

wax, and melt the whole, adding a little sweet oil or turpentine to preserve its consistency to the state of honey; add an ounce of powdered black lead to this composition, and the barrel of the rifle being perfectly clean, the composition may be put on like paint, very thin, laid by to dry, and polished to a smooth surface.

To give the barrel a red or brown color, add *red lead* or *ochre*, instead of the black lead.

To make the barrel *green*, add verdigrease, which must be first ground in *oil;* to make the barrel blue, pulverised Prussian blue.

The barrel may be preserved bright and safe from rust by this varnish, without adding any color to it; but it must be laid on very thin, and with great care; and the lock plate and parts open to the air, may be protected from rust by this camphor varnish.

Every rifle should have a stopper for the muzzle, and a leather cover with two returning straps to go round the lock and stock two or three times, and cover the whole lock, and so formed as to buckle complete to it.

§ 8. DRESS AND EQUIPMENTS.

Uniformity is essential, so is simplicity, there should be nothing glaring or bright about the rifleman or his equipments.

Warmth, durability and sufficiency, so that the body may be neither exposed to unnecessary inclemency of weather nor constrained in the free exercise of limbs and muscles, but at ease in all its motions.

His arms, shoulders, elbows, ribs, his knees, the calves of his legs and feet, should be entirely free from pressure or restraint; for this reason breeches should not be permitted to riflemen, nor to any other soldier, neither should they wear low quartered shoes or buckles on the instep; they should wear either the hunting or Jefferson shoe, with a flat half inch strap to wind once round the small of the leg above the ancle, and with a very neat buckle on the outside of the leg; or with a lace to be laced, the pantaloons reaching the ancle, faced with leather for six inches, and open four inches on the outside but so as to tie close if required.

The coat should be short and well fitted, the skirt reaching to the line of the fork; the color dark green, pantaloons the same; buttons yellow; waistcoat of the same color, or at least not white on service; color black. The head covering, a black cap of leather with a vizor in front, and an oil cloth of 24 inches square, folded within the crown, to be let down on an emergency of rainy weather to cover the neck behind; a green or black plume....the cord of the cap and the regimental letters plain and not shewy.

The knapsack square, with a square case for a blanket forming the cover, and the cap of the knapsack to contain necessaries.

His arms should be the rifle, with a short sword of 30 inches, worn close to the left side, perpendicular to the body, and susceptible of being used as a bayonet, he might have a small axe and a knife in his powder belt.

A cartridge box of flexible leather containing two rows of tin unsoldered cases, to contain 30 or 36 rounds ball cartridge; a double pouch slung over his right shoulder and under his left arm, one partition containing 60 loose well smoothed balls, and in the other partition his turn screw, knife, scouring brush, oil rag, patches. Over his left shoulder and under his right arm hang his powder horn with the best powder.

Three white shirts, two flannel shirts with sleeves reaching four inches below the elbows, and opening like a coat at the front, closed by two pair of tape strings at the breast and about the waist; two pair of flannel drawers reaching to the calf of the leg; two pair of socks for winter only....none to be worn from June to October The feet to be washed in cold water every morning as a rule of discipline; would preserve health, assure vigor, and render stockings and socks totally unnecessary.

The hair cut close to the head once a month.

The pantaloons for winter, woollen cloth; for summer grey unbleached linen or duck; and for an undress an unbleached hunting shirt with green fringe; the pantaloons by boiling with vegetable substances may be made a dark green; or with bark a dark brown; but the discipline should rigidly guard against dirt with such colors.

§ 9. OF EVOLUTIONS BY BUGLE SIGNALS.

It now remains to explain a very important object in the discipline of light corps, that of signals, by which the various duties may be performed beyond the range of the voice by signals of command.

The infantry of the line have for a great length of time been exercised by the beat of the drum; and cavalry manœuvres have been performed by the trumpet. Rifle corps have been moved by bugle horn signals; but no perfect or adequate system has yet been adopted in our service.

The present is an attempt to introduce the system of exercise and movement by signal to public attention; and to adapt it to the convenience of troops, however remote from each other. To this chapter is annexed, a series of sixty-one signals adapted to the bugle, on a regular scale of musical notation and time. Where buglers are not acquainted with music so as to play at sight, the notes may be performed on a violin or flute, and the bugler taught from the ear, by frequent repetition. An officer going into service may by a series of signals by the bugle correspond with a distant party, having previously arranged the signification to be given to each signal.

A review of troops in ordinary discipline may also be conducted by signal in the same manner; a previous order being made, and the signals arranged to the signals as numbered.

A bugle horn well blown may be distinctly heard in any kind of country by day three miles. Its importance for a medium of communication between an army and its out posts, is therefore obvious, since the human voice cannot be distinctly heard even in a clear day, from one flank to another of a large battalion.

This bugle has been universally used for light troops, and it is therefore proper to provide some method by which there may be a determined system of bugle signals. The following explanations and rules are therefore laid down, and a series of musical signals is provided and *numbered*, or objects to be accomplished corresponding in number thereto are annexed.

As signals of the bugle are intended to supply the insufficiency of the voice to communicate at a distance; it is only used where the voice cannot be so well heard.

Another method for out posts acting at night, where the voice is required not to be heard, is supplied by a whistle, for which a scheme of musical signals is also annexed.

Signals by the bugle should be simple and significant, and the signals for contrary orders should be as dissimilar, so that an ear not the least musical cannot mistake one for the other.

No command executed by the bugle should be begun to be executed until the bugle has finished the signal.

The signals should be classed into two descriptions....The first class to consist of all the signals, which being given from the place of superior command, should be repeated by all the buglers of the line, or that wing or division of the line; such are....*rouse*....*assemble*....*march*....*advance*....*skirmish*....*fire*....*halt*....*retreat*....*cease firing*....*disperse*....*to annul a previous signal*.... Other signals may not be repeated as they appertain, only to a corps detached or to the whole, and when understood require no repetition.

All bugle sounds are to be considered as referring to the actual state of the body for which the signal is made, at the moment it is sounded. For example....the word *halt* being signified by the bugle, while a corps or company is *retreating*, the halt must be understood in the very position they then are; or if the signal be to the *right about*, while *retreating*, or if *advancing*, it must be executed as ordered. The *retreat* is to be considered the same as coming to the *right* or *left about*, but if the word retreat be the signal, the officer advanced may choose and order the mode of retreat, whether in sections, by alternate files, or by single files, firing and retiring.

The actual front of formation need not be attended to so particularly in the advanced order; only that it must be taken care that *companies*, extending, do not intermix and carry off each other's files.

The *halt* is considered as annulling every previous signal.

When there are buglers with advanced parties, if the men hear a sound from the main body, they must not change their disposition by that sound, until their officer has ordered it to be repeated, or ordered it to be obeyed.

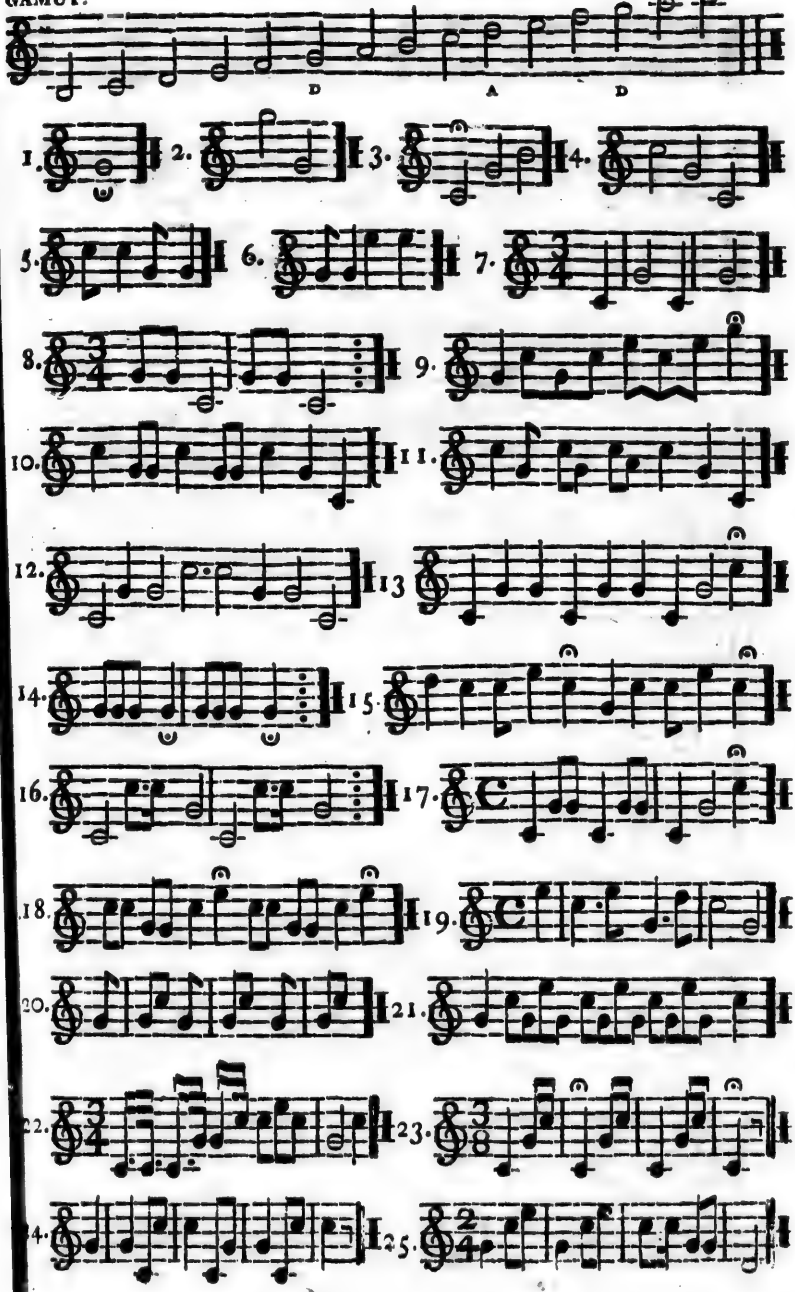
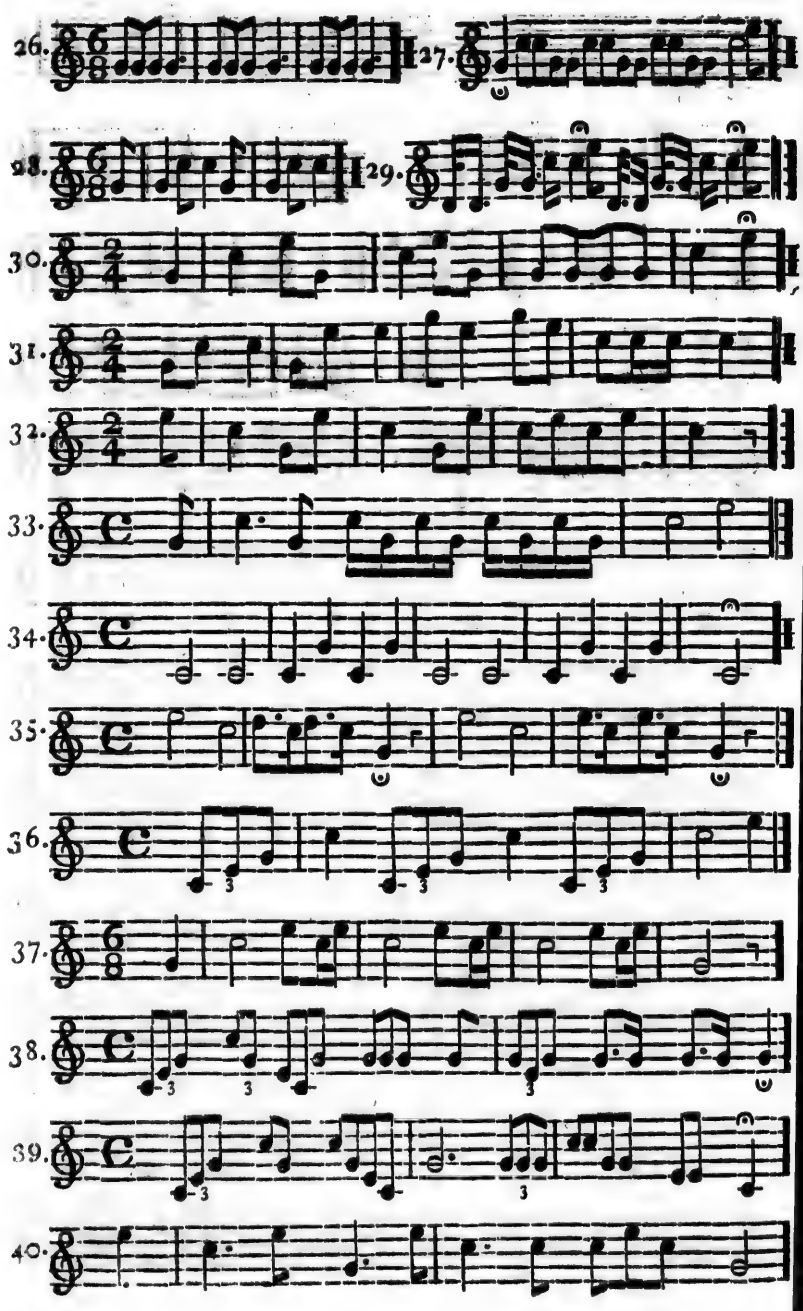
As this scheme may be accommodated to the various movements of every description of troops, only by selecting the

leading orders for manœuvre, and judiciously adapting the signals thereto; these numbers are not offered here as exactly the fittest for the several signals; but the scale of signals in musical notes being once adopted, the most proper signals may in due time be established.

Some of these signals are taken from the most recent modern military music; and the number might be augmented, if it were not preferable to limit them to a few; on account of the general unacquaintance of buglers with musical notes.

BUGLE SIGNALS.

1. Alarm.
2. Rouse.
3. March.
4. Skirmish.
5. Extend.
6. Close.
7. To the right.
8. To the left.
9. To the centre.
10. Send out an advance guard.
11. Pursue the enemy.
12. The charge
13. Cease firing.
14. Retire—or, retreat.
15. Assemble.
16. Disperse.
17. Run.
18. Rally.
19. Halt.
20. Load.
21. Fire.
22. Order arms.
23. Trail arms.
24. Advance.
25. Call in advance guard.
26. Call in Skirmishers.
27. Conceal yourselves.
28. Spring up.
29. Fire advancing.
30. Fire retreating.
31. Retreat and extend.
32. Retreat and close.
33. Form the chain.
34. Form sections.
35. Form echellons.
36. Form companies.
37. Form line.
38. Form column.
39. Form square.
40. Interrogative.
41. Affirmative.
42. Negative.
43. Annul.
44. The enemy is infantry.
45. The enemy is cavalry.
46. The enemy has riflemen.
47. The enemy has artillery.
48. The enemy is moving.
    To the right.
    To the left.
    To the centre.
49. Adjutants call for orders.
50. Buglers call.
51. Drill.
52. Fatigue.
53. Forage.
54. Rations.
55. Prepare to parade.
56. Officers assemble.
57. Officers' dinner.
58. The tattoo—1st post.
59. The tattoo—2d post.
60. The tattoo—3d post.
61. Setting the watch.

GAMUT.

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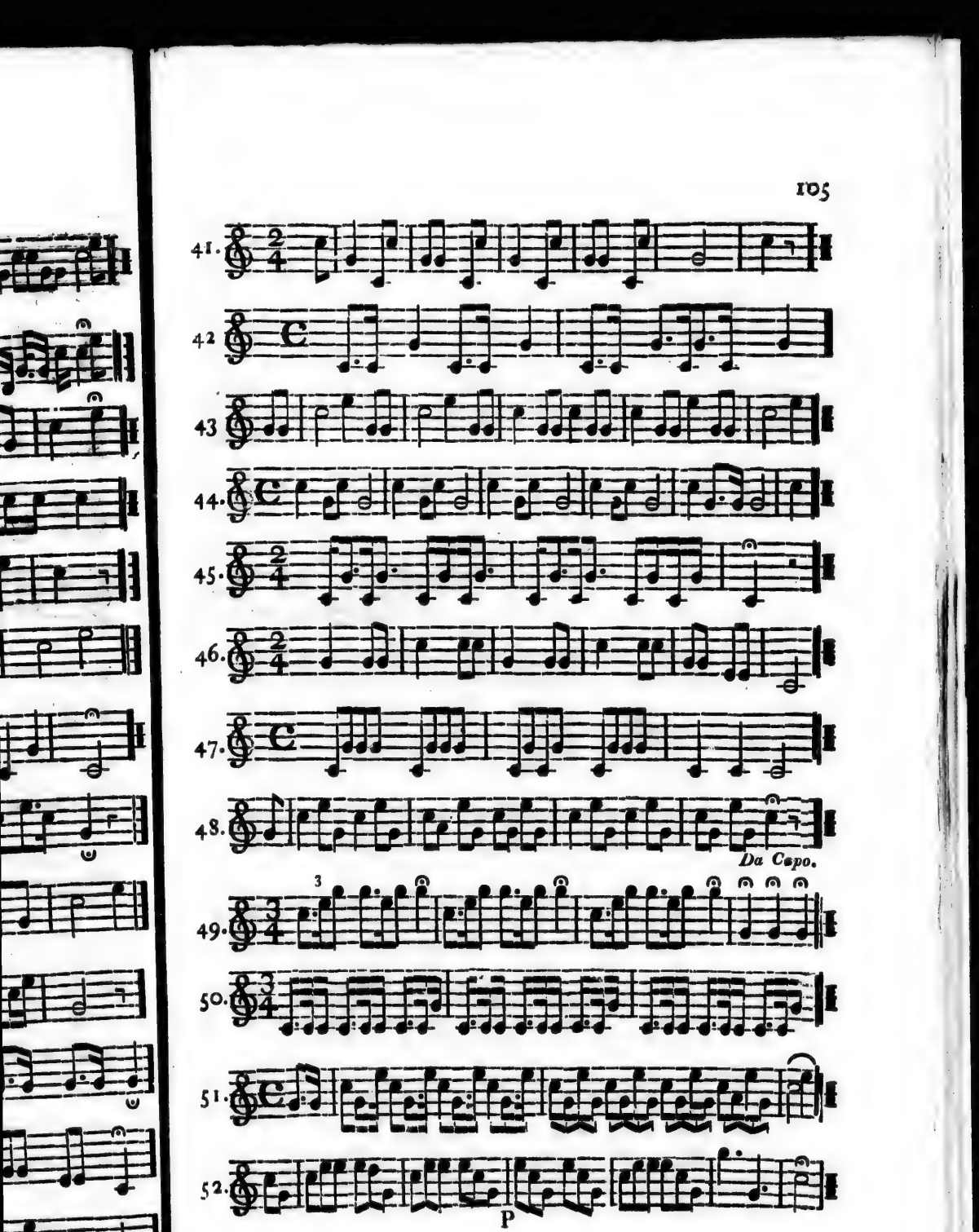
41.
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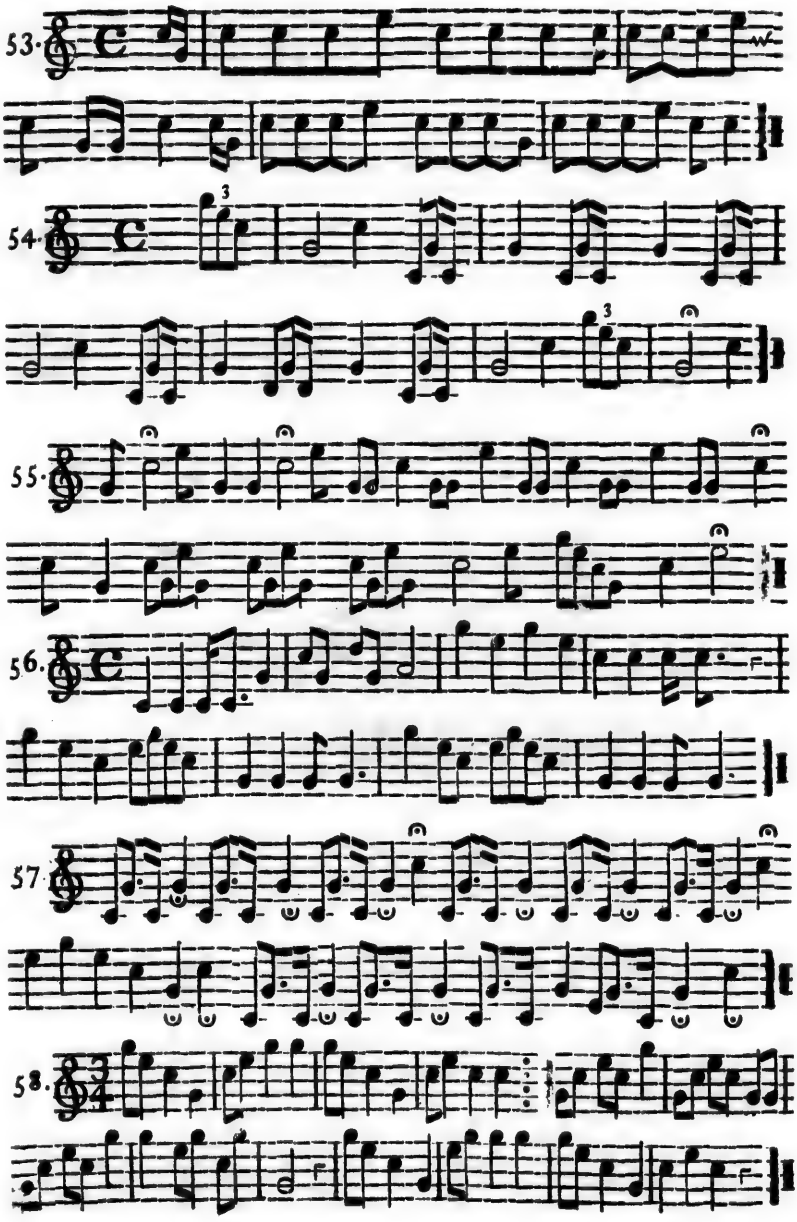
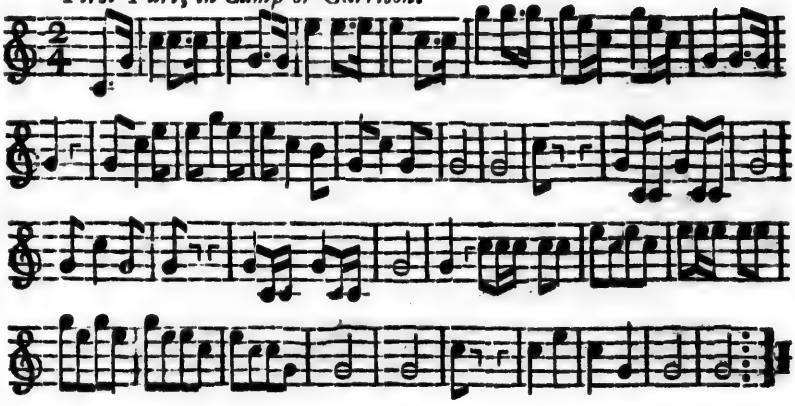
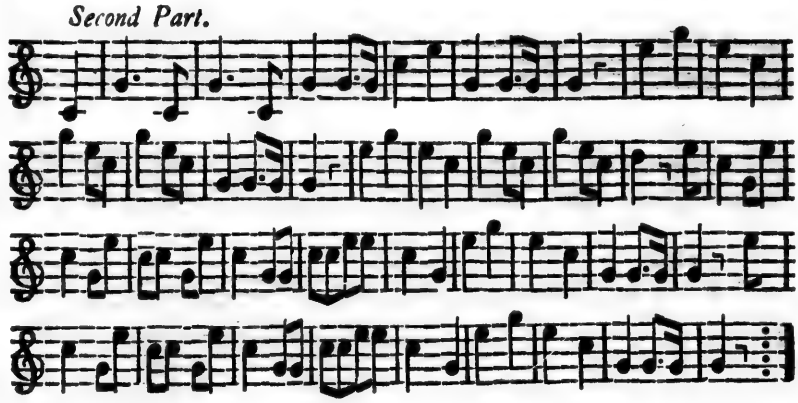
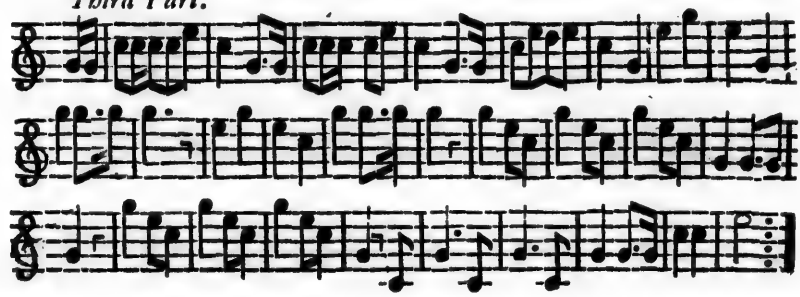
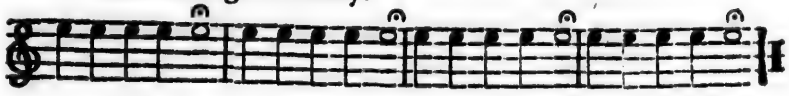
48.
Da Capo.
49.
3
50.
51.
52.
P

53.
54.
55.
56.
57.
58.

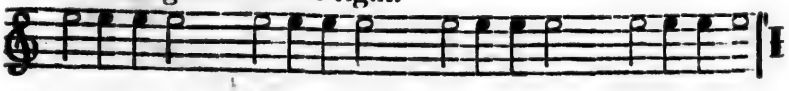
TATTOO.

First Part, in Camp or Garrison.

Second Part.

Third Part.

SIGNALS WITH THE WHISTLE.

Discovering an enemy.



Take ground to the right.



Take ground to the left.

Advance.

Retreat.

Halt.

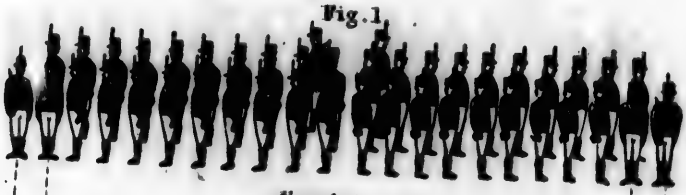
Commence Firing.

Cease Firing.

Close.

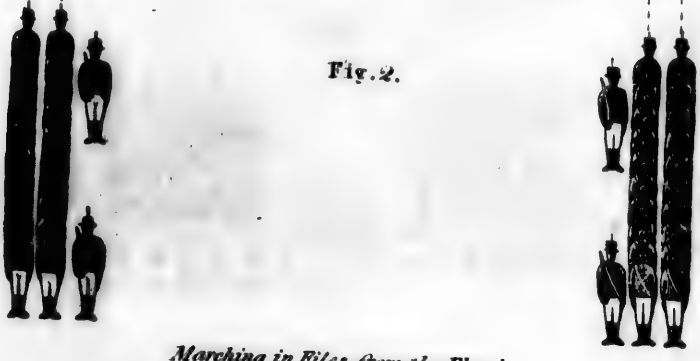
Plate. 1.

Fig. 1.



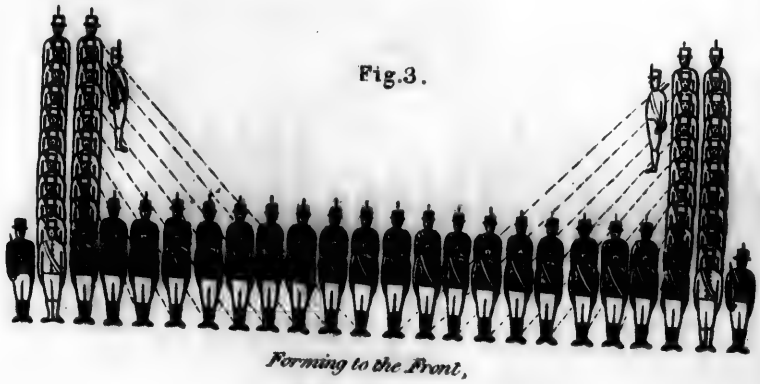
Faced Outwards.

Fig. 2.



Marching in Files from the Flanks.

Fig. 3.



Forming to the Front,
by the Oblique.

Plate. 4.

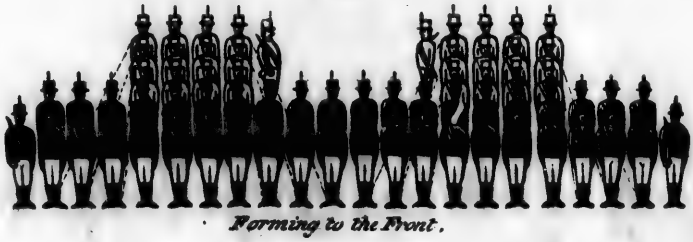
Fig.1.

Faced to the Center of Subdivisions.

Fig.2.

Advancing in Files from the Center of Subdivisions.

Fig.3.



Forming to the Front,

by the Oblique.

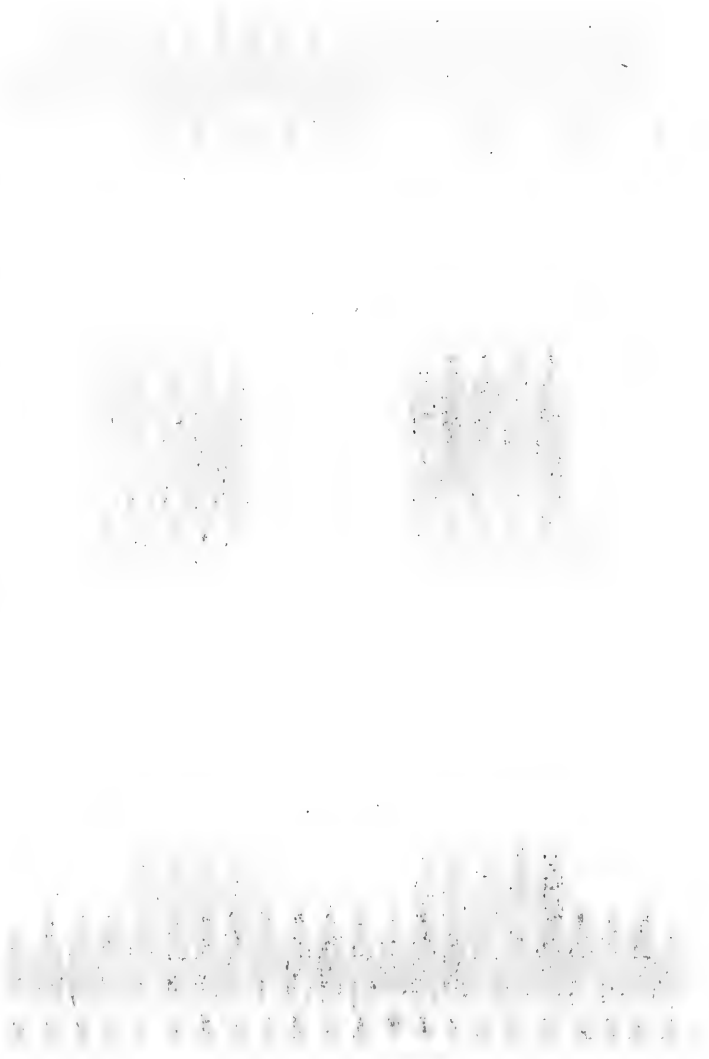


Plate. 5.

Fig.1.

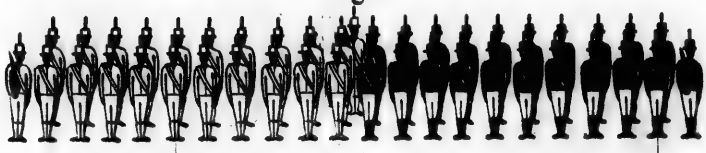


Fig.2.

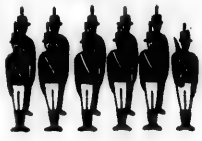
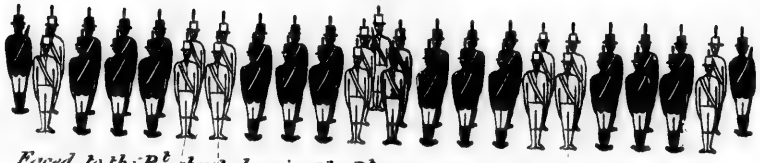


Fig.3.

Skirmishing with the Right Platoons in front.

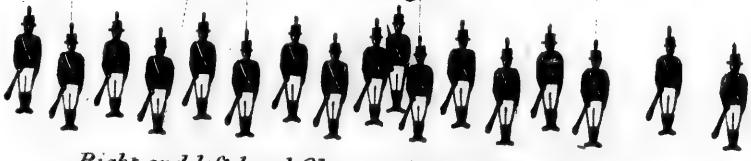
Plate. 6.

Fig. 1.



Faced to the R.t about leaving the R.t and left hand files of Sections fronted.

Fig. 2.



Right and left hand files covering the retreat of the Company.

Fig. 3.

Faced to the R.t about leaving the Center division fronted.

Fig. 4.

Center division acting as Skirmishers and covering the retreat of the Company.

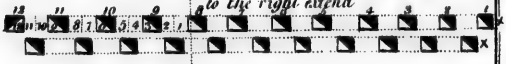
To Extend from right left or centre

Fig. 1.

to the left extend

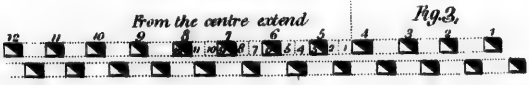
Fig. 2.

to the right extend



From the centre extend

Fig. 3.



The Company retreating in close order across a Plain

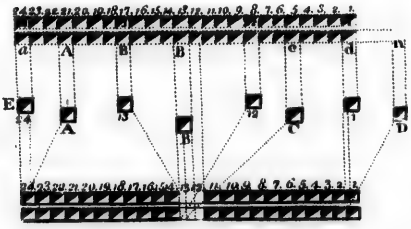
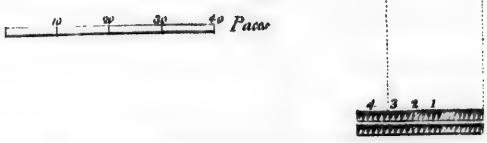


Fig. 8.

Formation of the Chain

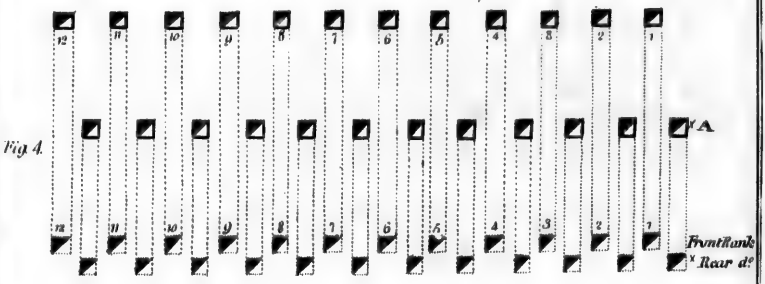
Fig. 9.



10 20 30 40 Paces

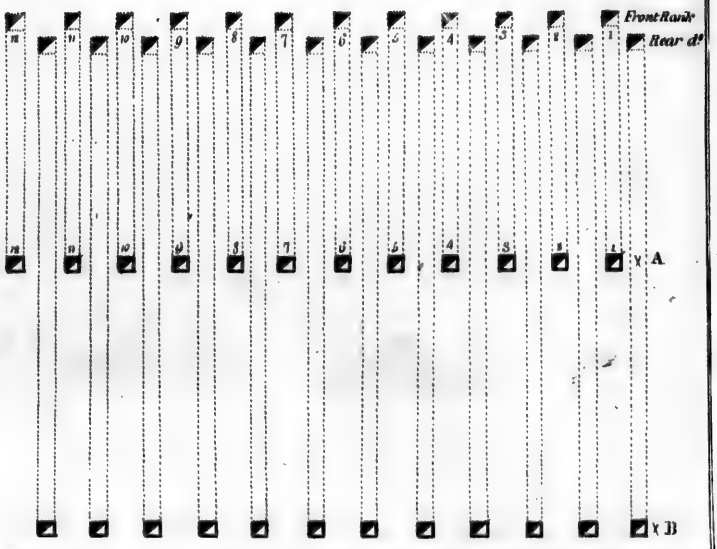
To Fire in advancing

Fig 4.

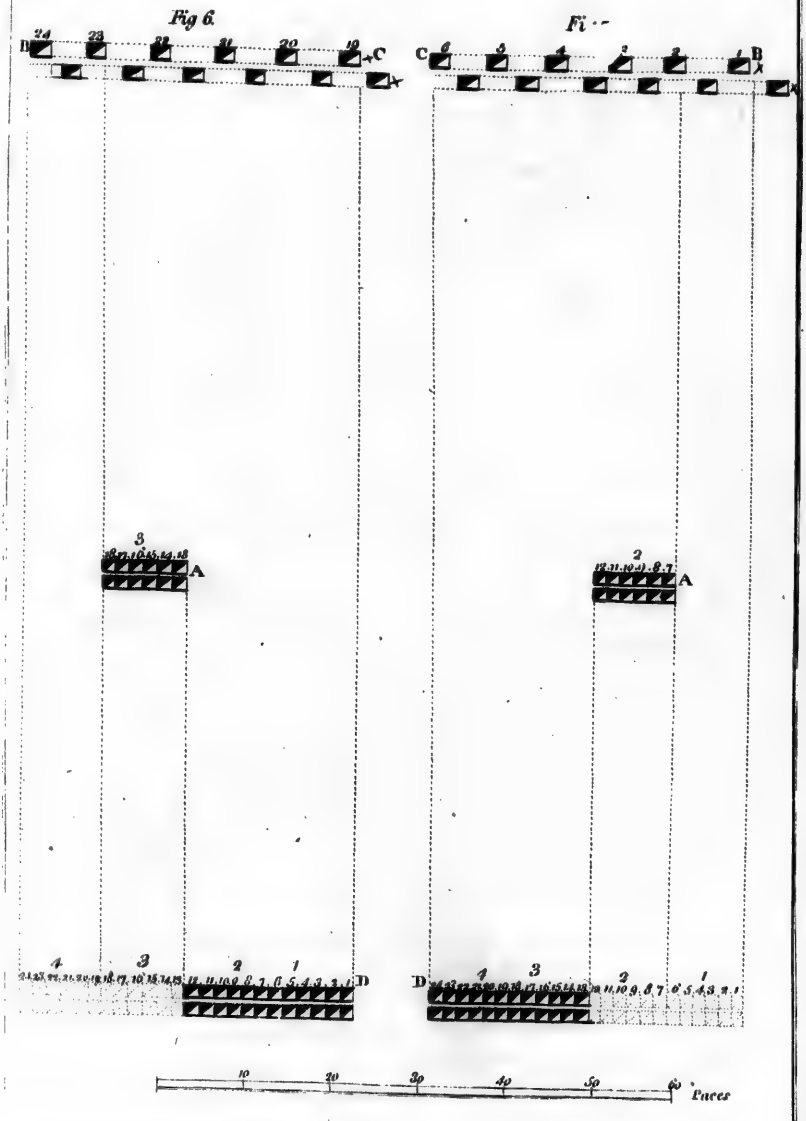


To Fire in retreating

Fig 5.



Of Skirmishing



Formation of the Column

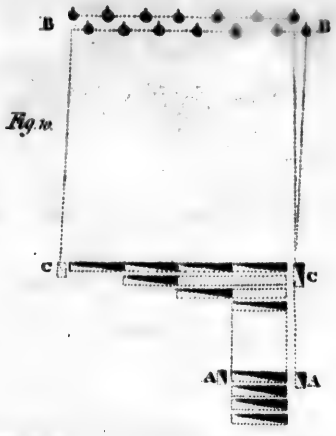


Fig. 10.

The formation and disposition of a company of Riflemen or light Infantry which is to form an advanced guard

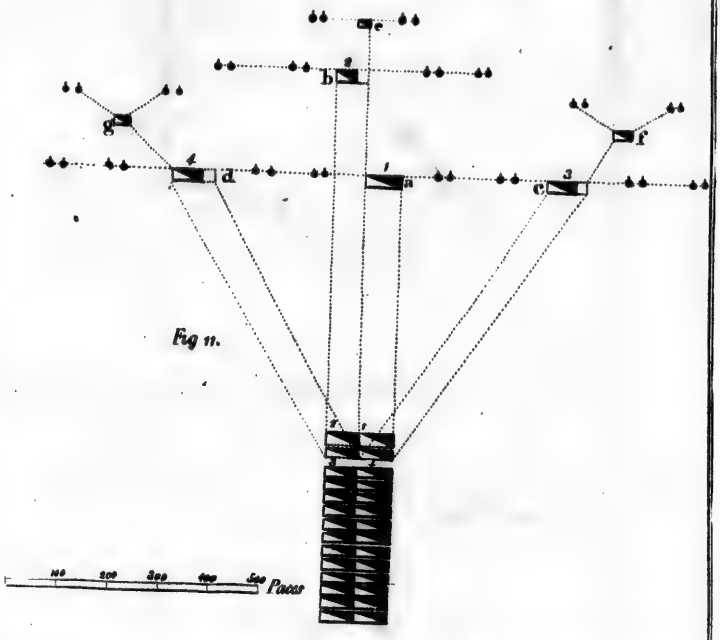
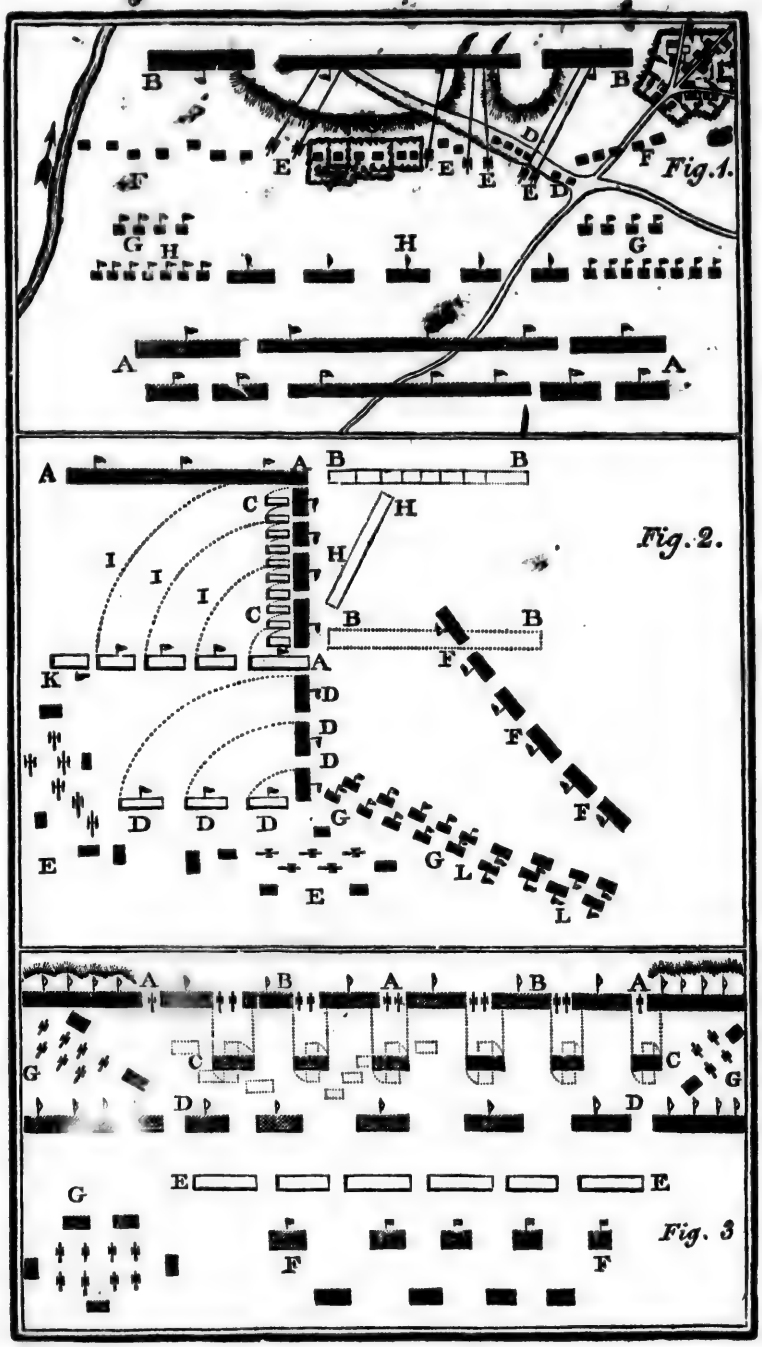


Fig 11.

A
K
E
G
G


B
B
D
E
E
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F
Fig. 1.
G
H
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C
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Fig. 2.
Fig. 3

Fig. 1.

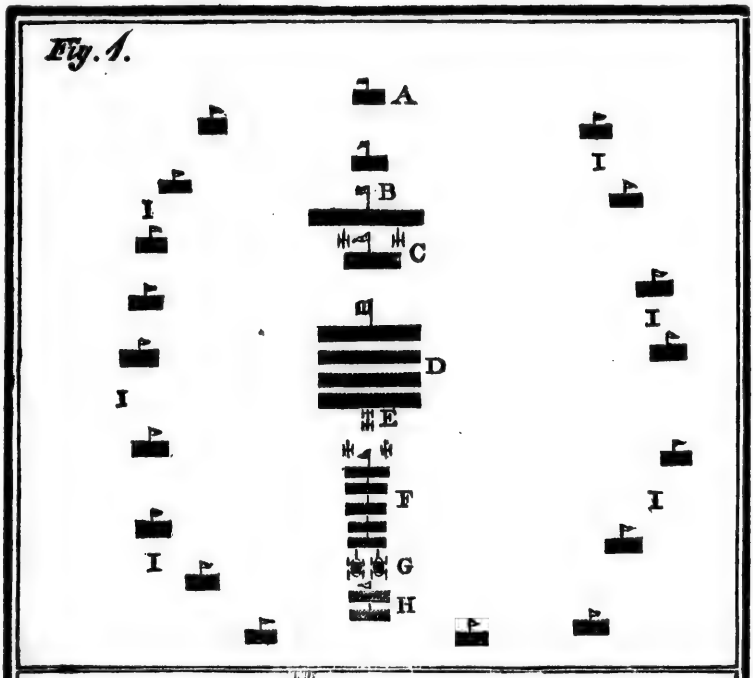
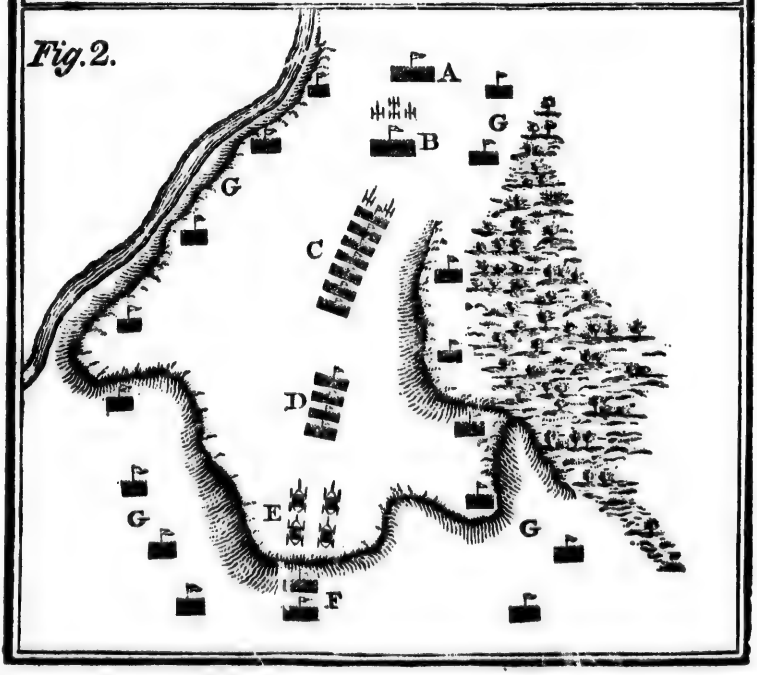


Fig. 2.



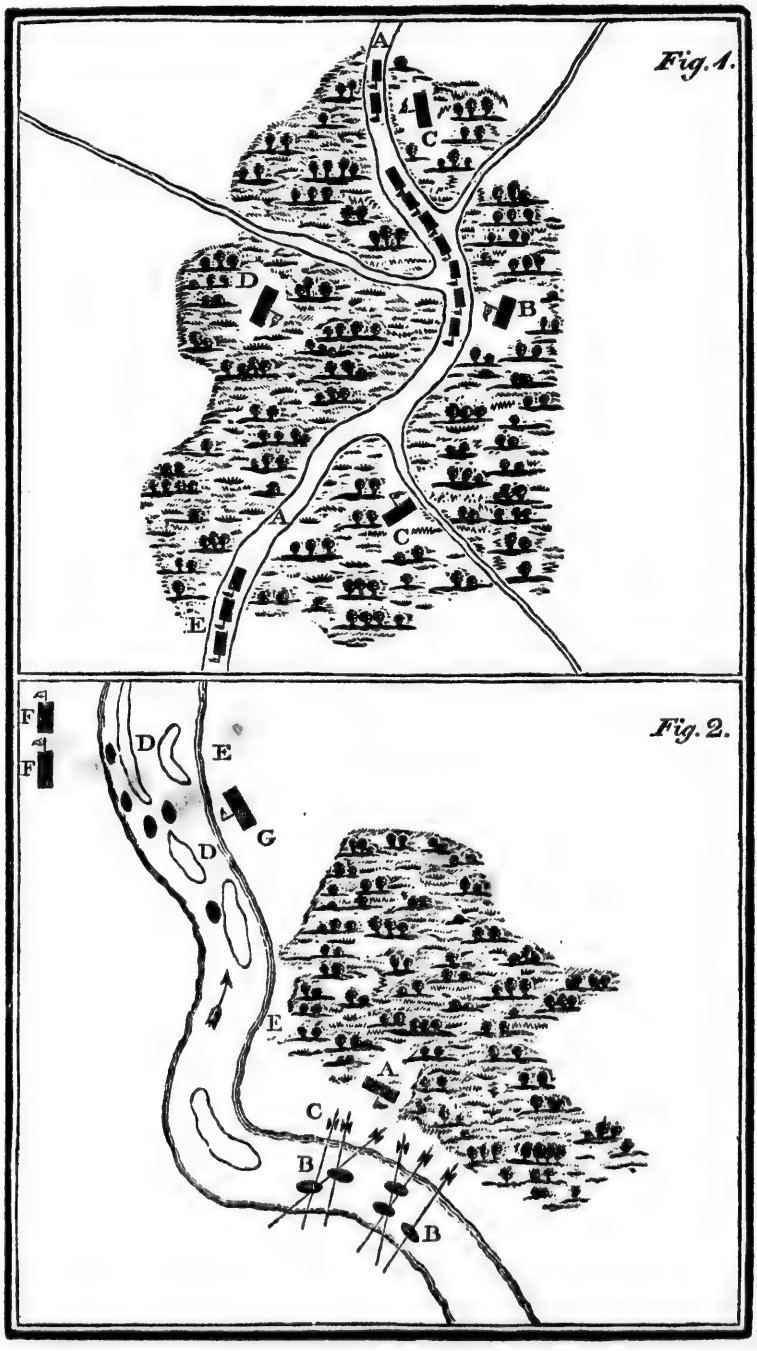


Fig. 1.
A
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D
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Fig. 2.
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G
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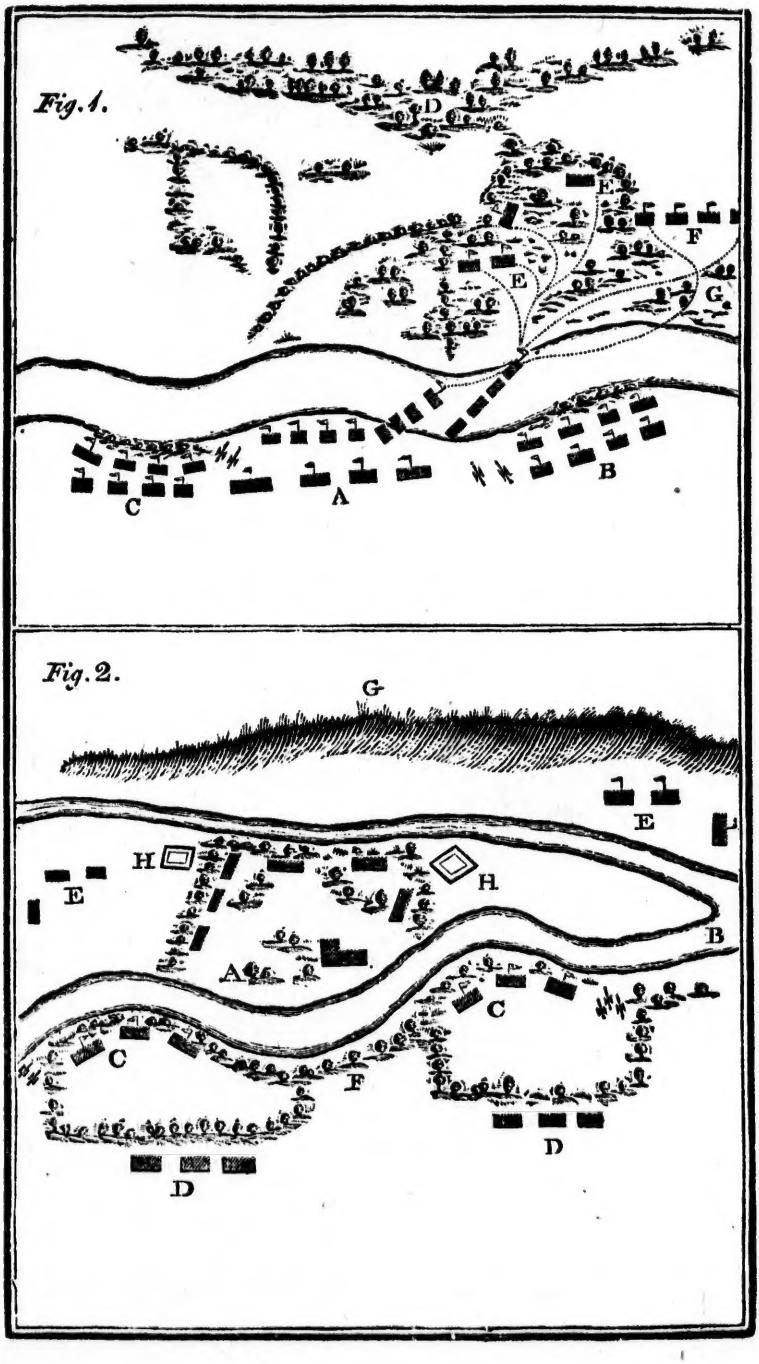
Fig. 1.
D
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Fig. 2.
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